TEXTILE BULLETIN

01. 67

TLY

DECEMBER 1, 1944

no. 7

CLOTH SPOILAGE STOPPED

WITH

NON-ELLIDO OIL

IN U.S. PAT. OFFICE&

FOREIGN COUNTRIES



7 out of 10 mills avoid production losses from oil spot "seconds"—by using NON-FLUID OIL for loom lubrication. In this one way alone NON-FLUID OIL saves its own cost many times over. Drip-less and waste-less, it lowers lubricant and application cost too.

Write for Instructive Bulletin

NEW YORK & NEW JERSEY LUBRICANT CO.

292 MADISON AVENUE

NEW YORK 17, N. Y.

Works: NEWARK, N. J.

Southern District Manager: FALLS L. THOMASON, Charlotte, N. C.

WAREHOUSES:

CHARLOTTE, N. C. - GREENVILLE, S. C. - ATLANTA, GA. - PROVIDENCE, R. I.

DETROIT, MICH. - CHICAGO, ILL. - ST. LOUIS, MO.

NON-FLUID OIL

The SONOCO CORK COT is NEW!

New in the sense that even after ten years of successful experience it is still the most practical cork cot construction for these three major features in which it excells, exclusively.

- 1—Ease of application.
- 2—Uniform drafting density.
- 3—Positive adherence to roll.

Because of

SONOCO'S exclusive gummed seamless fabric inner lining the patented reinforcing agent.







SONOCO MAKES EVERYTHING IN PAPER CARRIERS

SONOCO PRODUCTS COMPANY

HARTSVILLE

S.C.

DEPENDABLE SOURCE OF SUPPLY





PLAN NOW...

Today It's Probable that Your Cash Position is More than Ample.

But what plans do you have for maintaining your present liquid condition so that you can take advantage of opportunities when they arise? A proper program made now will benefit you more than you may realize.... Commercial Factoring is "business insurance" which those who use it would not be without. Perhaps we can serve you as effectively and economically as we believe all of our clients are served. May we talk with you about this?

COMMERCIAL FACTORS CORPORATION

Fred'k Vietor & Achelis, Inc. Established 1828 Schefer, Schramm & Vogel Established 1838 Peierls, Buhler & Co., Inc. Established 1893

TWO PARK AVENUE, NEW YORK

EUGENE G. LYNCH, 80 FEDERAL STREET, BOSTON, MASS. T. HOLT HAYWOOD, WINSTON-SALEM, NORTH CAROLINA

THE CFC PLAN IS NOT LIKE ANY OTHER FACTORING SERVICE ... THE DIFFERENCE IS IMPORTANT

Here are 5 TYPES of GATES V-BELTS



ONE of these five types Will Fit Any Need You Have!

Whenever a drive in your plant is wearing out belts faster than it should—or is giving any other trouble—just pick up your phone and call the Gates Rubber Engineer.

He can quickly analyze your problem and, in most cases, he can correct the trouble very easily without needing to specify the use of any specialstructure belts.

There <u>are</u> service conditions, however, under which a V-Belt of special construction can most profitably be used—and your Gates Rubber Engineer can then supply a Gates V-Belt that is precisely engineered to meet the unusual conditions.

The Gates V-Belt of special synthetic rubber is a notable example. As a result of specialized research, Gates developed this synthetic rubber V-Belt and began supplying it in large quantities to industry more than six years ago. Under severe conditions of heat and oil, this Gates special synthetic V-Belt actually outwears any natural rubber belt by as much as 230%.

In your particular application, V-Belts with tension members composed of flexible steel cables Steel Cable
V-Belts

S Rayon Cord V-Belts

4412

—or of rayon cords—may prove to be the most efficient and economical. Again, Gates Static-Safety V-Belts may best fit yur special need.

In any case, the wisest move you can make is to phone the Gates Rubber Engineer. (Just look under "Gates Rubber" in your phone book.) He will come right to your plant—will thoroughly analyze any drive problem you may have—and he will always recommend the practice that will be most efficient and economical for you.

THE GATES RUBBER COMPANY

Engineering Offices and Stocks in All Large Industrial Centers

GATES VULCO DRIVES

CHICAGO 6. ILL.

DALLAS 2, TEXAS

NEW YORK CITY 3. 215-219 Fourth Avenue BIRMINGHAM 3, ALA. 801-2 Liberty National Life Building DENVER 17, COLO.

CHARLOTTE 2. N. CAROLINA 605 West Fifth Street GREENVILLE, S. CAROLINA

ATLANTA 3. GA.
738 C & S National Bank Building

"GULF QUALITY LUBRICANTS

help keep me ahead of the spinning room"-

SAYS THIS CARD ROOM SUPERINTENDENT



Actual photo of a Gulf Lubrication Service Engineer (left) consulting with card room Superintendent on the lubrication of roving frames.

WORKING AT TOP SPEED to keep ahead of urgent spinning room demands, we can't take chances on production jamming up because of time-consuming overhauls and repairs," says this card room Superintendent. 'That's why we pay close attention to lubrication —and use the oils and greases recommended by the Gulf Service Engineer. These quality lubricants help keep all our machines up to maximum poundage week in and week out.'

This mill, like many others, realizes definite production advantages from the use of Gulf quality oils and greases, applied as recommended by Gulf Lubrication Service Engineers. For these lubricants are scientifically manufactured to stand up under even greater punishment than modern high-speed textile machinery in continuous operation can give them. They provide a film of superior lubricating value that is a constant safeguard against excessive wear and resulting mechanical troubles.

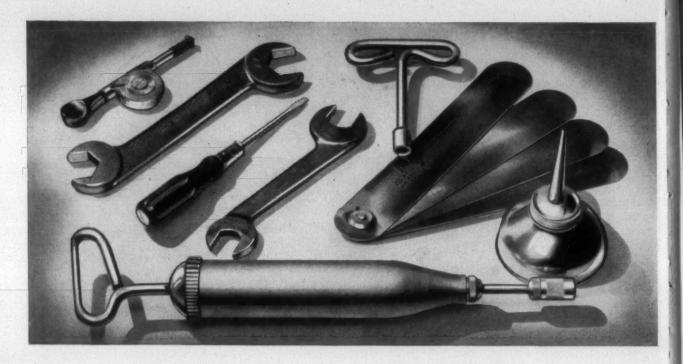
Gulf quality lubricants—and the helpful counsel of Gulf Service Engineers—are available to you through 1200 warehouses located in 30 states from Maine to New Mexico. Write, wire, or phone your nearest Gulf office today.

GULF OIL CORPORATION . GULF REFINING COMPANY

Gulf Building, Pittsburgh 30, Pa.



They'll Win Production Battles For You



And there are plenty of production battles yet to be won --- for still-needed war materials and, later, in the highly competitive field of peace-time textiles. Even though you have new machinery "on order" --- (chances are your competitors have also) ---- it's no time to ease up on maintenance.

Textile machinery, like new cars, is not going to flood the market on V-day. The manufacturers of textile machinery, having diverted a large part of their facilities to the production of war materials, are faced with a substantial reconversion problem, and it's going to take time to gear up for peace just as it did for war.

This is why you can lose your production battle even after V-day by neglecting now to keep your old equipment in its best possible condition.

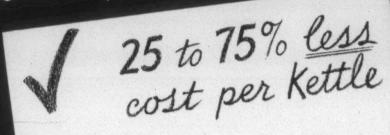
- (1) Lubricate - with the proper lubricant and on a definite schedule.
- (2) Check your settings and adjustments frequently.
- (3) Check your speeds. Get the most out of your machines. Don't let either belt slippage or excessive speed rob you of production.

Maintenance is vital - - - - to Victory - - - - and to Peace.

WHITIN MACHINE WORKS

WHITINSVILLE, MASSACHUSETTS, U. S. A.
CHARLOTTE, N. C. ATLANTA, GA.

When you want all these-These are some of the advantages you



Added breaking strength -

Less decrease in elongation-

will obtain when you

use Houghto-Size in your sizing solution. For the full story of Houghto-Size and the unique Houghton Size Check-Up Test, ask the Houghton Man, or write-

E. F. HOUGHTON & CO. PHILADELPHIA and CHARLOTTE

A simpler size formula –

Fewer loom. stops

0

g

HOUGHTO-SIZE FOR COTTON WARPS



Cak LOON

Speed of Operation?

DOES IT INCREASE

Ease of Operation?

Quality of Fabric?

DOES IT DECREASE

Cost of Maintenance?

DOES IT IMPROVE

Continuity of Operation?

DOES IT IMPROVE

Appearance and Utility

These six challenges are levelled at every new idea for the improvement of C&K Looms. And if any idea can't meet at least one of these challenges, then it's not a good idea—either for us or for your own weave-room efficiency. So it is permanently filed in the wastebasket.

This searching test is being applied, now, to new ideas developed during the war effort . . . ideas involving new materials, methods, and machines. For decades of hard work have taught us, long since, that newness alone has nothing necessarily to do either with practical mechanics or economics.

That's why new improvements in C&K Looms won't come altogether, all wrapped

up in one dazzling package, as soon as the war is over. They'll come in due course, when they have proved able to stand up to this 6-point test... which is the best protection you could have, both for your mill and your customers.

So plan to take C&K Looms as they come along with their proven features. Don't wait for a complete miracle which can never possibly happen, while other mill men pass you by.

Crompton & Knowles Loom Works

WORCESTER 1, MASSACHUSETTS, U. S. A.
PHILADELPHIA, PA. . CHARLOTTE, N. C. . ALLENTOWN, PA.

between Today's War Weapons... and their New Uses in Tomorrow's Looms



THIS is a story of a plant whose post-war future looked rosy . . . business was tremendous; product quality tops . . . then suddenly the war ended; conditions changed. This plant lacked adaptability to meet new demands and obsolescence claimed another victim.

You can avoid this very real danger by installing flexible equipment NOW, which should include the Foster Model 102 with a . . .

7-WAY FLEXIBILITY

1 It will wind any kind and any count of staple yarn from fine-combed cotton or rayon for tropical fabrics to heavy wool yarns for arctic cloths.

2 It will wind a straight base cone for warping or a convex base cone

for knitting with a simple adjustment.

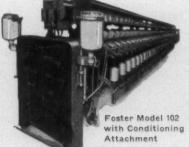
3 It will produce 9 different angles of wind from 9° to 18°. Important if you radically change your count or type of yarn.

4 It will wind package dyed yarn, even if damp. No jumping out of guides.

5 It will wind emulsion treated yarn. In fact, it is frequently equipped with an emulsion attachment.

6 Changeovers from cones to tubes, or vice versa, are comparatively inexpensive.

7 One side can wind cones and the other tubes, if desired.



Foster Machine Co.

WESTFIELD, MASS.

Southern Office Johnston Bldg., Charlotte, N. C.

FOSTER MODEL 102

FOR WINDING COTTON . WOOL . WORSTED . MERINO . MERCERIZED . SPUN SILK AND SPUN RAYON YARNS

Season's Greetings

N a year when the blessings of Victory and Peace are cherished beyond measure, Christmas assumes a fuller and more compelling significance not only to us who are at home — but more especially to our loved ones in the Armed Services throughout the world.

As the New Year dawns, we hopefully look forward to a world at peace in which man can again contribute and receive the blessings so richly deserved by his labors. We of the Arkansas Company pledge ourselves anew to work harmoniously with our fellow men to the end that we may be worthy members of the World of Tomorrow.

ARKANSAS CO., INC.

Manufacturers of Industrial Chemicals for over 40 Years
Newark New Jersey



Post-War Problems of the Textile Mannfacturer

By HARVEY W. MOORE

Vice-President and Treasurer of Brown Manufacturing Co., Concord, N. C.

PROM the press, the platform, the economist, the politician, and even down to the cracker-box sage in the corner grocery store, we are receiving suggestions and advice with respect to post-war business. This means that the public is thinking in terms of that day when business shall emerge from a war to a peace economy.

The optimism which prevailed both in civilian and military circles early in September that the European war might end in November has passed from the picture. Today there is a gratification shared by the entire country because of the growing military victories of the United Nations on all the fronts. This gratification is tempered only by the realization of the great cost, in lives and treasure, at which these victories are being won and by the doubt of the American economy to adjust itself with a minimum of disorder and confusion to the stress and strain when our industrial system must change its direction from production for war to production for peace.

Every war in our history has been followed by a period of uncertainty. These periods, however, were of short duration, ranging from one to six months, and were followed by boom periods of from 12 to 18 months duration. After World War I the boom period, following five months of hesitation, lasted about one year before it ended in collapse. With these historical facts before us it is not inappropriate that we study the advice offered to the cotton textile industry by the press, the platform, the economist, the research laboratory, and especially the advice of the experienced textile manufacturer. It is an acknowledged fact that the cotton textile manufacturer must approach the post-war days with the knowledge that he is engaged in a highly competitive industry.

In the Monthly Review of the Federal Reserve Board of Atlanta, issue of Oct. 31, 1944, it is stated: "One of the outstanding characteristics of the cotton textile industry is its competitive nature. Not only is the internal organization of the industry highly competitive, with the production of any given cloth construction overlapping many competing mills, but it is feasible for many mills to shift easily from one type of construction to another, depending upon the state of the market, since little more than a quarter of the looms of the country are designed for specialized production. The main check to such shifts lies in the possibility of disturbing the balance among the machines in a mill well-designed for the production of a given cloth construction and the consequent possibility of piling up idle equipment.

"Not only is the cotton textile industry highly competitive within itself, but it is also highly competitive with

other industries producing commodities that may be substituted for cotton. Advances in industrial chemistry are widening the area of such intercommodity competion every day. The domestic cotton textile industry also competes with foreign producers, both in foreign markets and in the domestic market. The number of substitutes that are ready to step into the breach created by any reduction in the consumption of cotton is continually increasing. Synthetic fibers, such as rayon and more recently nylon, have replaced silk to a very large degree in the field of fine fabrics and are beginning to cut deeply into the field formerly occupied by cotton. Under Army specifications, rayon tire cord has been replacing cotton tire cord during the present war.

"In addition, the paper industry has been encroaching upon cotton markets to a very serious extent. Paper hand towels, napkins, handkerchiefs and facial tissues, gummed tape, and woven paper automobile seat covers are all more or less familiar. Experiments are now, it is said, being made in the production of paper bath towels. With paper bed sheets already on the market, the manufacture of paper shirts and other articles of clothing is within the bounds of possibility. Paper bagging for such heavy materials as cement and fertilizer and paper for wrapping packages are very common, and now paper for baling purposes is beginning to replace the cotton and jute wrappings.

Fiber glass also promises to be a competitor of cotton in insulation and in many other industrial uses where inflammability and resistance to decay are important properties. To some extent fiber glass may also invade the apparel field. The metal industries were beginning to penetrate cotton markets even before the war with metal conveyors and transmissions that replaced cotton belt conveyors and transmission belting. The metal industries have now perfected a wire that is being used to replace cotton cord in fan belts for tanks and jeeps and that, after the war, may completely replace the cotton cord and cotton duck used in the manufacture of rubber belts, rubber tires and similar products.

"Under the pressure of this competition from substitute materials, the cotton textile industry is becoming increasingly research conscious. Vigorous efforts are being made, or planned, to utilize the findings of chemical and industrial research in order to give this ancient fiber new properties that will enable it to meet its new antagonists on a basis of quality."

Not only is the cotton textile industry highly competitive but it is a mobile industry. That is, it is not fixed in any locality but may move on to other localities that are more favorable. It is recalled that—(Continued on Page 49)



USE 8-POINT PLAN FOR AN OVERBOARD DRIVE IN THE 6th WAR LOAN!

NOV. 20th TO DEC. 16th

Our fighting men still have a long way to go! But—your plant-wide selling of the 6th can do much to shorten their embattled miles—lessen the price they so willingly pay for victory! Join the coast to coast parade of patriotic firms that are assuring an "overboard" showing in the 6th by following through on every point in the 8-Point Plan.



Start the ball rolling by appointing a 6th War Loan Bond Committee, representing labor, management and other groups.



Carry on by selecting a Team Captain—preferably a returned veteran—for every 10 workers.



Right at the start, establish a Quota for each department—and every employee.



Arrange frequent Meetings of Captains, highlighting importance of their work—effective sales methods—and need for painstaking study of Treasury Booklet, Getting The Order.



Make definite Assignments to those best equipped to arrange music, speeches, rallies, competitive progress boards and meeting schedules.

Issue Individual Pledge Cards—made out in the name of each worker and providing for both cash and installment purchase.

Resolicit! This is the secret of "overboard" War Bond subscriptions. Your State Payroll Chairman has a special Resolicitation Plan for you to put into action near the end of the campaign.

Give generously of your Advertising Space to drive home the War Bond story.

The Treasury Department acknowledges with appreciation the publication of this message by

TEXTILE BULLETIN

This is an official U.S. Treasury advertisement-prepared under auspices of Treasury Department and War Advertising Council

SPRING-POSITIVE EXPANSION AND SPECIAL COMBS

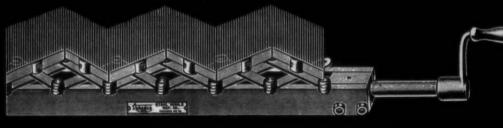
Are you using the one that is most advantageous for the particular construction of the fabric you are weaving, regardless of texture?

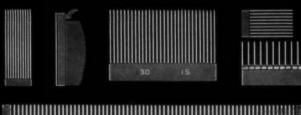
Much can be accomplished by the use of the proper comb.

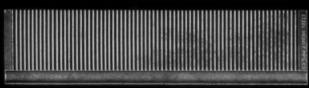
That is why our Engineers have devoted so much study to their use and construction with the result that we have possibly the largest assortment from which to choose.

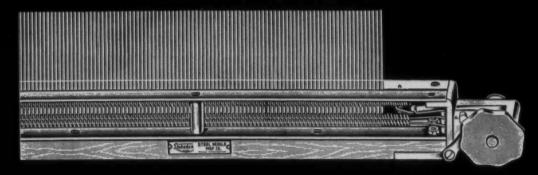
Our Field Staff will be delighted to work and check with you free of any

See our BULLETIN ON COMBS









STEEL HEDDLE MFG. CO.

Manufacturers of Superior

BRANCH OFFICES ALL OVER THE WORLD

FLAT STEEL HEDDLES-HARNESS FRAMES-ALL TYPES OF LOOM REEDS-TEMPERED DOGWOOD SHUTTLES-LOOM HARNESS ACCESSORIES 2100 W. Allegheny Avenue

Philadelphia, Pa.

FIELD ENGINEERS **EVERY DISTRICT**



THIS

REDUCES

because it is nonsweating and t ends to repel fibers

RMSTRONG'S new Accotex Cots are made of a cork-andsynthetic-rubber composition that does not "sweat." It has little affinity for textile fibers. Consequently, with Armstrong's Accotex Cots there is less top roll lapping than with other synthetic roll coverings.

These advantages, along with the others listed at the right, explain why Armstrong's new Accotex Cots-though first offered to mills only two years ago-are already serving more spindles than any other synthetic covering.

If you would like to prove these advantages in your own mill, get in touch with your Armstrong representative. He'll be glad to give you complete information about Accotex Cots and arrange for you to make your own mill tests. Or write direct to Armstrong Cork Company, Textile Products Department, 8212 Arch Street, Lancaster, Pennsylvania.

- 1. LONG SERVICE—Accotex Cots are tough. And they can be rebuffed 3 or 4 times.
- 2. GOOD DRAFTING-Accotex Cots retain their excellent grip, because they resist slicking.
- 3. REDUCED EYEBROWING-The resistance to slicking minimizes eyebrowing.
- 4. REDUCED LAPPING-Accotex Cots have little affinity for textile fibers and are nonsweating.
- 5. GOOD START-UP-Accotex Cots are non-thermoplastic and resist flattening.
- 6. SOLVENT RESISTANCE Accotex Cots are not affected by oil, water, dyes, or textile solvents.
- 7. SEAMLESS CONSTRUCTION—Accotex Cots have no seams-can't break open in service.
- 8. QUICK ASSEMBLY—Accotex Cots are ready glued.

ARMSTRONG'S ACCOTEX COTS

CORK COTS . ACCOTEX APRONS



Proper maintenance, although too often neglected, is one of the most important phases of textile manufacturing. Maintenance is of two types—preventive, and repairs after breakdowns. The officials of Riverside and Dan River Cotton Mills believe in preventive maintenance and have recently made available to the industry their experiences in setting up such a system. Cecil C. Elliott, superintendent of maintenance in that organization's Dan River division, explained the workings of this system at a meeting of the Southern Textile Association Master Mechanics division at Charlotte late in October, and again during a meeting of the S.T.A. Piedmont division Nov. 18 at the North Carolina Vocational School, Belmont. His prepared paper begins on this page. How the mill master mechanic fits into the picture is brought out in an abstract of pertinent parts of the discussion at Charlotte which begins on page 25. R. F. Nichols of Newberry, S. C., was in charge of this gathering, and during it was re-elected chairman of the S.T.A. Master Mechanics division. At Belmont Mr. Elliott was aided by Raymond E. Henderson, superintendent of the Dan River division, in explaining what part other mill operating executives play in relation to the system. The discussion at Belmont was led by Culver Batson, chairman of the S.T.A. Piedmont division; the abstract of it begins on page 26.

MASTER MECHANICS' SECTION

Machinery Maintenance in the Textile Industry

By CECIL C. ELLIOTT

EVERY profitable industry has its specialists, experts and research laboratories, but the textile manufacturers are bringing up the rear in this field, and I feel that it is time that we woke up to the fact that something must be done. There has not been a great deal of improvement in this industry in the past 50 years. We must improve our machinery, working conditions and streamline our methods for improved quality, efficiency and lower cost of operation in order to meet competition after this war.

We at Riverside & Dan River Cotton Mills are attempting to train our supervisors and employees through vocational schools and correspondence courses. In our maintenance department alone we have 49 employees going to vocational schools, taking training in mathematics and specialized maintenance work on various textile machinery. Twenty-five picked men from our maintenance department are engaged in training courses through correspondence schools.

Some great writer noted, 'If a man does not know to ized the run-down condition of our machinery, and decided We know that we are taking the right steps toward a better trained and more profitable organization. With this training we will give our people a greater opportunity for advancement in the textile industry. I feel it is time that the textile industry learns to what port it is steering.

Some three years ago the management of our mills realized the run down condition of our machinery, and decided that something had to be done. With the shortage of experienced men and supplies, this called for some careful planning. Our textile industries depend upon production planning and controls as much as the human being depends upon the heart to pump life blood through the body. Plan-

ning and control are the heart of industrial procedure. Nothing influences all phases of industry—financing, sales, materials, products, tools, equipment and labor—so completely as does production and maintenance planning and controls. Ineffective procedure results in waste of effort, materials and time, all of which cost money. To it, we may attribute many failures in the textile industry.

Our management realized that in order to install a maintenance program all ideas and plans must be workable, and must get results. They decided, with the responsibility of manufacturing supervisors, that the practical thing to do would be to organize a specialized overhauling and maintenance program on all machinery and set it up under one specialized supervisor. Instead of training men to do many jobs, it is much easier to train men to specialize on one thing.

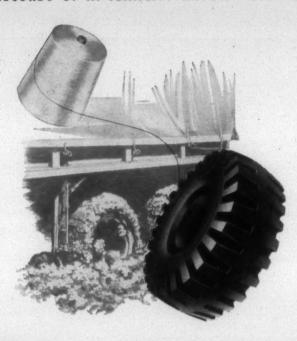
Our organization being large, this department was set up under a machinery maintenance superintendent, working directly under the general mill superintendents, whereas many smaller mills have their maintenance department set up under the engineer or the master mechanic.

In our Dan River maintenance department we are responsible for about two-thirds of the machinery. My department has charge of overhauling, maintenance and lubrication of all opening room machinery, 39 pickers, 975 cards, 199 drawing frames, 406 roving frames, 20 combers, 64 twisters, 1,365 spinning frames (total spindles 338,736), 16 Barber-Colman spoolers, 21 warpers, 17 Abbott winders, 43 quillers, five yarn conditioning machines, all bobbin and quill machines and all waste department machinery.

We have set up in this department specialty overseers in

Where the going is Heavy-

FAFNIR BALANCED DESIGN PAYS OFF IN PERFORMANCE
RECORDS OF HI-TENACITY RAYON TWISTERS



Army tests proved the extra performance margin of Hi-Tenacity Rayon Cord for tires to carry men and supplies over "impassable" roads. Millions of yards were needed – quickly.

Old-style twisters were out. Hi-Tenacity Rayon Cord called for new, high speed twisters capable of handling the oversize yarn

Saco-Lowell specifications for these new twisters called for ball bearing spindles. Their tests proved this to be a job for Fafnir 302K Single Row Radial Bearings. Incorporating the famous Fafnir Balanced Design – larger balls and deeper races – these bearings could carry the extra *thrust* load of an oversize yarn package and the heavy *radial* load caused by the pull of the tape.

The increased speed of practically all textile machines calls for ball bearing performance at critical "turning points". You will find extra-performance Fafnirs on more and more of these high speed twisters, looms, winders and slashers. They are delivering the kind of uninterrupted service you want from the machines in your mill.

Fafnir service-engineers have lived with the textile industry. They know its problems and will be glad to work with you to meet your bearing requirements. The Fafnir Bearing Company, New Britain, Connecticut. . . Branch Offices: Atlanta . . . Birmingham . . . Boston . . . Charlotte . . . Dallas.

Types of Fafnir Ball Bearings Widely Used on Textile Machinery



Single Row Radial



Wide Inner Ring with Self-Locking Collar



Mechani-Seal

FAFNIR BALL BEARINGS



BUY WAR BONDS AND STAMPS

charge of the various groups of machines as follows: one specialty overseer in charge of all opening, picking, card room and waste department machinery; one in charge of all spinning and twisting; one in charge of all spooling and warping; one in charge of lubrication on all the above mentioned machinery, also lubrication of 7,645 looms; and one in charge of all service shops—instrument and counter shop, harness reed and band shop, salvage shop and leather binder shop. This gives a definite responsibility to each supervisor and relieves the manufacturing supervisors of machinery maintenance. The manufacturing supervisors give us what they want on requisitions, such as changing frames from warp to filling, speeds, setting, etc.

It is these specialized overseers' duty to see that all maintenance, overhauling and other work is on a scheduled basis. Also it is his responsibility to direct and inspect all work and see that supplies are ordered to replace all worn parts, and are in the supply room ready for the overhauling crew. With these specialized men looking after our machinery, it gives our men on the production and manufacturing jobs more time for better production, which enables us to get a much better job done on our machinery maintenance at a much lower cost, as well as closer and better supervision.

All Jobs Are Specialized

As I have mentioned before, due to the shortage of experienced men it has proven to be more practical and profitable to train men for special jobs. We have trained men doing the following specialized work in the card rooms: overhauling, maintenance, card clothing, combers, drawing and slubbers. We have a specialized crew of overhaulers and spindle plumbers who completely overhaul, clean steel rolls, and line and level our spinning and twisting frames once each 12 months. This work is laid out and followed on a definite scheduled basis. Another crew of steel roller cleaners follows our overhauling crew six months after overhauling. This allows a scheduled cleaning of steel

rollers twice yearly and overhauling all frames once yearly on a two-shift operation.

We have our specialized spinning maintenance men, one in each spinning department, or five men that cover 1,365 spinning frames. These men check the entire frame, getting six to eight frames daily, at intervals of from 45 to 50 days. A maintenance man knows exactly what to do when he goes to a frame. On his first round he stops the frame and checks parts at the top of the frame. On the next round he checks parts lower down. On his third round, in checking idle pulleys and parts on lower part of frame, he has a small truck on which he rides to save time and increase efficiency.

These men wear small aprons so that they may carry their tools, each one in a separate pocket, disposed so all they have to do to get a special wrench or screwdriver is reach up and pull it out of the pocket of the apron. These men also are working on a definite schedule. We have all their supplies carried to them by a supply boy so as to keep the skilled man at his highest skill at all times. As I have stated they have forms to make out reports of findings. These forms are sent to our maintenance office to be posted on record cards of each individual machine.

We also have two first-class spinning frame men who check a spinner's sides at intervals of 90 days. Each time an end comes down on a spinner she makes a mark on the ring rail. Of course some ends come down more often than others. The duties of this man is to find what caused the end to come down. This has reduced end breakage 15 per cent in our mill.

We have specialized cylinder, steel roller, belt and pulley men. All our work is on a definite schedule and specialized men are on every job. By having such a program our cost of keeping our machinery in condition has been lowered 25 per cent, with better production, less end breakage and better satisfied operators.

The majority of our men at Dan River only needed to be trained in order to develop into good mechanics and skilled workmen. Any good mechanic is going to have

DAILY FRAME MAINTENANCE REPORT			CARD GRINDERS REPORT					
SP	INNING		E MAINTENANCE REPORT DRAWING DATE	Division				
	1	DAILY FRAM	DRAWING DATE	Mill No.	1000			Me
HA GEPT FLO	DOR DATE				Floor	-	Shift	
	SUE RING		MOTOR PULLEY	Card No. Set Up				
ARE FRAME CRAME No	SIZE REIG. 3	DEPT	MOTO	1	-			
ION No.	HANK ROVING	MILL		S. Brandson St.	READDARD	Cato	WAY BUT	STANDARD
		PRAME		Delies - Critedes	2/1000	Garnes Fre		
beck the following items on lat	4rt Road	CHECK THE POLLOWING	16. Back Lash	Rias Critadas	10/1000	Prunt Pin		8/160
ime around the frame.	Ath Resed	OMEN'S THE POLLUMEN		Lieberin - Cylinder	2/1000	Franchia	10.316	87/3010
		CHECK	17 Oct Holes	Food Plate - Lickaria	19-15/1990	Back plate	Design	82/1990
No. Rollers changed	2). Chark sight pulitys	1. Top Cleasers	11 Miles	Baller Camb - Doller	17-22/1900			22/1900
Ceck Leather	28. Chack oil pipes	T. 108	18. Proper Cilina	Streen Sack	18/1899	Base Plats		28/1000
Deres Other	28. Clean Hilero	" Clearers	16 Dans	Ricean Butson	94/1000		creat . Back	18/1989
. Maller her fingere	28. Class out check Pittmen	2. Botton Clearers	19. Roll Weights	THE PERSON NAMED IN COLUMN TWO	NAME OF TAXABLE	hitteria 5	crees - Nues	16
tightened	taller	0.114	19. 801		-	Fint Comb		22/1840
	25. Check builder chale	8. Top Rolls	work Bolts	A STATE OF THE PERSON NAMED IN COLUMN TO STATE OF THE PER	The state of the state of	Mate Knive	on . Page	10/1000
L. Covers on flex glearage	. 26. Clean and obore head.	musta Front	20. W. Stock Bolts				Bettem	7/1880
replaced	all goers and study	4 Kind Rolls-Front	21. Belts					
. Covers on revolving clearers		5. Kind Rolls-Back	21. Bolts	mile to the second				
* SEGLECTED TO THE PARTY OF THE	\$7. Check separature	n. Wind Rolls	Boodles	Check fellening an each Co	and Rev. Up			
. Size raliers elected	Start frame and thock t		ge shipper Bandles					The state of the last of the l
. Chutes us steel rulls	following.	6. Date Buffed		COMDITION OF CYLINDER	FILLETT	COLLEG H	DAD	
Cleaned	101109106		28 Cleanliness	" Dutles			Lis bea beauting	ALCOHOLD STREET
. Check hack acaveses:		7 Roll Stands		" " Place		1000 1000	CALBRANE AND BUT	M.
relle	26. Check pick goars		24 Trumpets	Cont. But			State cleaned or	M. siles
Check tack eraventer rulis	28. Check pieze and busch	S. Calender Rolls				CHUNE AND	It gears cleased	
*Aprileas	\$6. Check shipper bootle	S. Co.	25. Cooplings	Mate Knice		Oll Seese	in head sineed	And willed
. Check saddles	21. Check belt shipper	9, Roll Settinds		All brinter closed & cat	1	The state of the s		
C. Check tuning traverse	32. Check draft grat covers		26 Hank Clock	Fint bruth camb in good at	ersetr.		OR STRIPPERS	
C. Cherk results restricts	Mr. Check hank clock	10. Tension Gent	The same of the sa	Plat dishs turn free	861	Both Searly	tat cleaned	
		10. Tens 101	27 Traverse Medical	Brainnian sain Irea		Sei swipe i	to 1-4"	
		- TANK	22 116000	Stringing roll stands and p	19201			
2nt Rosel	Check as a mit	11. Draft Gear	28. Mark Board	All green set proper				
	COURT OF STREET	are Matically	26 Mark Mark	All geen revers us		VACUUM ST	Williams.	The second second
Lavel weight levers		12. Knork Off Mations		Calendar Saile Clausel		All-nerests		Section and the second
1. Cherk roller weights	de. Check sixed atrips	The state of the s	29 Bearings	Feed roll beerings alonsed		Borns la gi		the same of the same of
2. Cat all tight and loose	25, Check helts on motors	13. Coiler Beed	29 Bearings 30. Buff Stop Motion Spoons	n oiled				
Asale	55. Condition of cilian		on Butt Stop men	All beise proper league		D-25 12 811	ne steet	
Cherk extilider		14 Turn Tables				50		
8. Cherk has cylinder bactlege								
	Parte and 1	15 Gear Settings						
		13. 1000						
3rd Round				All Rechines siled proper b		1 1		
		Dark Seeden		moraruse stred broken p	olenes grindlage			
		Supply Parts Seeden		Renacte				
E. Cheys thubes on lifter			AND THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.					
reds		- 4(1)					-	the state of the state of
7. Loud ping thile	The state of the s	France Hand (1)	No.					
a. Check trans for high on low	The state of the s		Nech Maiol, Mar					The second second
Sebbias			The state of the s			Driedes		
th. Chain one street and jaw	Make any remerks necessary on b	ere or seed.				***************************************		
aute on hillers area		THE RESERVE OF THE PARTY OF THE						

Typical forms which are filled in by members of the Dan River division maintenance department upon completion of scheduled tasks. An idea of just how exact the Dan River system is may be gained by noting details of the reports.



The WHY for all the ORANGE in the weave room



"Hairitan" is an exclusive tannage for loom services—giving you the greater resiliency and longer life which you demand for those services. Improvements made during the early part of the war have convinced users that "Hairitan"—with its great resiliency and high tensile strength—is at least the equal of any "European-type" hair-on leather.



You can depend upon uniformly high quality in "Hairitan" products because they have been tanned and finished under one roof, under one control of quality. Graton & Knight, making many types of industrial leather goods, can select for "Hairitan" the most suitable hides... and through every stage of manufacture, develops the qualities most desirable for your loom leathers.

The ORANGE LINE

One Quality Control from Hide to Loom

PICKMASTER PICKERS with the famous "Life Saver" hole

BLOCK PICKERS extra-resilient, cemented under pressure

"TWO-FOLD" CHECK STRAPS straight or endless

JACK & FLAT HARNESS STRAPS for heavy duty work
ROUND HARNESS & DOBBY STRAPS center-stock
"Hairitan"

LUG STRAPS 4 or 5 ply folded, stitched; 2 or 3 ply, cemented

LUG HOLD-UP STRAPS . . . BUMPER OR SPINDLE STRAPS 1 or 2 ply

All "Hairitan" products are identified by orange color on the flesh side.

Graton & Knight also manufacture oak-tanned pickers, lug straps, bunters, box plate and binder leathers... "Research" rub roll aprons... G&K condenser tapes... G&K comber and gill box aprons... "Research" leather belting.

Make sure you are getting the best results from every one of your leather loom products. Send for valuable catalog on G&K leather products for textile mill uses. Also ask to receive, regularly, informative literature on loom leathers.

Address Graton & Knight Company, 328 Franklin Street, Worcester 4, Mass.





ORANGE LINE LOOM LEATHERS

Supplied by the leading distributors to the textile industry ...look under Graton & Knight in "Belting" section of Classified Telephone Directory or THOMAS' REGISTER. See complete catalog in TEXTILE WORLD YEAR BOOK.

good tools. We have had our men equipped with adequate tools and the following equipment: portable work benches on wheels with drawers to carry tools and supplies; drill presses; hand drills; grinding wheels; modern aligning and leveling sets; precision gauges; and vises. Each man has forms to make report of work done on and supplies used showing machine number. With this equipment we have been able to prevent our skilled mechanics from making errors in regard to machine shops, stores, etc.

Daily and Weekly Reports

We have mimeographed forms for daily and weekly reports on work done by each man. These reports and forms are turned into the maintenance office. All information, parts used, cost, date work was done, etc., is included. Valuable knowledge of weak points of various kinds of machinery are accumulated by our records. This information enables us to overcome defects in machinery caused by various reasons. I remember we have had trouble with our upright chains continuously breaking. We found from our records it was a general problem throughout the mill. We called meetings and used the records for evidence to discuss the matters and talked them over together. Usually we find a solution of remedy and have the trouble avoided in the future. You can see that the results on keeping records are well justified.

It must be realized, however, that even this improved system would have been of little value unless an adequate lubricating system was put into our plant. This system as I have mentioned is set up under the supervision of one

PERIODIC LUBRICATION RECORD

Division

Dept. Mail No. CONTRED BY LUBRICATION GLARY NO. MON.

PART TO BE LUBRICATION

RECORDER

PART TO BE LUBRICATION

RECORDER

LUBRICATION INSPECTION

RECORDER

R

Above are forms which are used by lubrication engineers.

specialized overseer working under direction of the maintenance superintendent. Before we put this program in operation you could find people that were paid to oil machinery doing other jobs, such as laying up roving, running errands and many other tasks instead of oiling the machines. We can understand with the shortage of labor why many of our manufacturing overseers did this. They hadn't stopped long enough to think what it cost not to give our machinery properly scheduled lubrication.

After we had found that many bearings were having to be replaced for lack of lubrication, our management agreed that we must follow up our overhauling and maintenance program with a scheduled lubricating system. We found that many of our machines had no oil lines. Many bearings were clogged with cotton and waste and their oil holes had to be cleaned out. These caps are all painted yellow so that the oiler would not have to spend so much energy looking for them. On our spinning frames our oil lines on our middle cylinder bearings are equipped so that the oiler can oil two rows of frames with one trip down the alley.

Since this closely supervised lubricant system has been in operation we have lost very few bearings because of improper lubrication. We know that the proper lubricant is used at the proper time in the right place. We thus avoid employees being taken off an oiling job by the production supervisor to do other work—causing machines to be neglected and not given proper attention.

Co-operation Is Most Necessary

Organizing our maintenance specialized program at Dan River was no easy task. It required a lot of time and study, most of all the co-operation of our department heads. The success of our department was accomplished through the good co-operation of all our department heads, superintendents, overseers and second hands. Many ideas and suggestions were used that came from helpers and mechanics all co-operating and working together to the betterment of our machinery and department.

At our Dan River division we have seven service auxiliary specialized shops working directly under the supervision of the maintenance department.

First we have our roller shop that serves our entire organization, which covers and buffs all spinning and card room rolls, covers and repairs all scavenger rolls, covers all clearers and gauges and inspects long draft spinning aprons.

Next we have our leather and binder shop with the following jobs: covering and polishing all loom binders and box plates; building loom pick bumpers; repairing and recorking all friction disc and clutches; repairing all cork pulley faces and cutting revolving clearer cloth aprons.

The inspection shop inspects all spinning and twisting bolsters, inspects straightening all spinning spindles, repoints spinning and twisting spindles, packs and ships all spindles for repairs, and inspects all pulleys and change gears.

Our instrument and counter shop repairs all hank clocks, pick clocks, yard clocks, mechanical roller pickers, does experimental work, installs traveler cleaners in spinning ring holders, rebuilds Barber-Colman cheese cores, repairs and services electric fans and Foxwell guides. The harness, reed and band shop repairs, cleans, polishes and stores all reeds, repairs and builds loom harness and manufactures all spinning bands.

All new bobbins and quills from the various manufactur-



General Chemical "B&A" Reagent Acids and Ammonia

Quality in quantity shapes success...increases product potentialities. That's why, wherever reagent grade mineral acids or ammonia in commercial quantities are specified for industrial operations, General Chemical "B&A" high purity products are an outstanding choice nation-wide.

These reagents from America's foremost producer of mineral acids conform to exacting A.C.S. specifications. Their quality and purity are the result of General Chemical's progressive research and advanced reagent production technique, combined with invaluable "know-how" gained during almost half a century's manufacture of basic chemicals for industry.

Specify and rely on General Chemical "B&A" Reagent Acids and Ammonia for your operations. Remember...their dependability has been "proved in production" by America's leading manufacturers!



il

e 10

0

d

GENERAL CHEMICAL COMPANY

40 RECTOR STREET, NEW YORK 6, N. Y.

Technical Service Offices: Atlanta . Baltimore . Boston . Bridgeport (Conn.) · Buffalo · Charlotte (N. C.) · Chicago · Cleveland · Denver Detroit • Houston • Kansas City • Milwaukee • Minneapolis • New York Philadelphia • Pittsburgh • Providence (R. l.) • St. Louis • Utica (N. Y.)

Pacific Coast Technical Service Offices: Los Angeles • San Francisco • Seattle, Wenatchee and Yakima (Wash.)

In Canada: The Nichols Chemical Co., Ltd. . Montreal . Toronto . Vancouver

General Chemical Reagent Acids and Ammonia are produced by the Company's Baker & Adamson Division, makers of laboratory reagents and fine chemicals since 1882. The experience of this Division with high quality chemicals embraces over 1,000 purity products.

"B&A" Sulfuric Acid, Reagent, A.C.S. Sp. Gr. 1.84

"B&A" Hydrochloric Acid, Reagent, A.C.S. Sp. Gr. 1.18-1.19

"B&A" Nitric Acid, Reagent, A.C.S. Sp. Gr. 1.42

"B&A" Ammonium Hydroxide, Reagent, A.C.S. Sp. Gr. .90

"B&A" Acetic Acid Glacial, Reagent, A.C.S.



Quantities: "B&A" Reagent Acids and Ammonia are available in carboys as well as in five-pint or one-pound bottles, which are obtainable in case lots or less.

Stocked at key locations throughout the nation.

FRIENDSHIP IN BUSINESS

We don't expect business because of friendship, but we have many customers whom we can call friends. We've EARNED their friendship by giving honest values and conscientious, prompt service.

May we have an opportunity to earn YOUR friendship?

LAMBETH ROPE CORPORATION

New Bedford, Mass., Southern Office, Johnston Bldg., Charlotte, N. C. Mírs. of Spinning Tape, Mule Rope and Banding. Also Sales Agents for Lambeth Products Corp., Antrim, N. H., Makers of Canvas Lug Straps

ers come first to the bobbin shop for careful inspection. Often we find a large percentage of bobbins that are too high, too low, out of balance, and crooked. With the close supervision of this shop the result we find is that we have been able to reduce our waste yarn. All our carding and spinning bobbins are inspected once per year. All old bobbins that have been in operation for 12 months are inspected thoroughly. We have bobbin painting machines in this shop that after they are inspected and are graded good they are painted a certain color to indicate when they were inspected. We consider this one of the most profitable jobs that we have in operation.

Last, we have the salvage shop, which takes care of all broken and worn parts to be cleaned and checked, and parts that may be salvaged are repaired and returned to stores. All scrap metal, boxes, barrels, etc., are sold to junk dealers by this shop. Its workers clean loom crank shafts to be metalized by the machine shop, build cleaning mops and clean and store exchangeable machine parts.

In summarizing, let me state again that the basic idea of our maintenance organization is to eliminate to the greatest extent possible the stoppage of machines due to breakdowns, which would inevitably result in bad work, too much waste and irregular speeds. This program has required a lot of time to be put into operation. We by no means have it worked out to perfection. Each week we find improvements which we adopt. We know that this is the right solution to the problem that we are now faced with. Our results prove this.

Master Mechanics' Discussion

R. F. Nichols in charge

C. L. MILLER, JR., assistant superintendent of the Locke Cotton Mills, Concord, N. C.: What part does the master mechanic in your organization play?

MR. ELLIOTT: Our master mechanic has charge of our machine shop, steam and power. We have a rather large plant and it is thus more profitable for us to set up a machinery maintenance program under a definite superintendent, rather than through him. But in a smaller mill, it would be advisable to set it up under the master mechanic or the engineering department.

J. L. ROBERTS, shop foreman, Cannon Mills Co., Plant No. Six, Concord, N. C.: Mr. Elliott, on your salvage, when you go back to the supply room, what do you do about the charges?

MR. ELLIOTT: Very often we find that a set-screw will become worn, but the parts will be good; maybe that part costs six or eight dollars. This salvage shop can clean that out and put a larger set-screw in. Each week we have deliveries to our stores, and we charge them back to the stores at 25 per cent of the cost. Very often we find an electrician leaving pieces of pipe and conduit, and pieces of wire; we salvage all that and turn it back in to the stores.

CHAIRMAN: As I understand this thing, Mr. Elliott, the overseer of the department, his end of it is the production, and also he has got to have the machines, to get that production; and if a spinner or whatever it may be—we will say a spinner—reports that to his department, he immediately gets in touch with your department and has whatever it is—those things that are unforeseen. For instance, if

your man inspects Frame No. 11 today, and passes on by, and day after tomorrow they have a breakdown, I imagine his inspection sheet is brought up and they ask him, "Why didn't you do so and so?" And immediately you are notified of that breakage, and the men go right there and repair it? Is that right?

MR. ELLIOTT: Yes, our "trouble-shooter" goes to that frame and fixes it.

MR. ROBERTS: Another question: In our picker room, for instance, we have regular men who stay in there; and, under your arrangement, do you have men based there to look after everything that might happen and, after they get it fixed, do they go back to some particular place and wait for a call?

MR. ELLIOTT: In our picker room we overhaul our pickers; then we have a maintenance man there, similar to our spinning set-up; he tries to find these troubles before they happen. But right now, in case of a major breakdown or a fire burning an apron off, we have to run to my overhauling crew and pull a man off his regular work, and take him there and bring him back. But in our shops, we are going to be able to put skilled men in there, like we do in the electrical department, and let them work in our shop. For instance, if the picker room gets in trouble, they dispatch a man to fix it, and probably a girl will fill his time until he comes back. But we have got our overhauling and maintenance in our picker room on a definite schedule.

W. S. Jones, master mechanic, Marion (N. C.) Mfg. Co.: In the beginning of your experimental work, compared with the way you are doing now, how did you start this work? Did you first begin to train some one to do this, or did you have these people who were already trained and capable of doing this?

MR. ELLIOTT: That is a very important question, and that has been our big problem. When we first realized that our machinery was broken down and that we were not getting anywhere, we took the overhauling away from the mill supervisors and put it under one head. As we went along, we added the maintenance men to it, and finally we added the builder men and the sanders—and then we realized that we were not getting lubrication. We have all overhaulers to bring the bearings into the office and let us look at them and see whether they need lubrication. You have to sell all your men on this program; it's a sales job, and it's a tough one; but, once you make them realize the importance of it—when a man realizes that, that's his job then—and he can get efficiency and quality, as well as quantity. And you have so much more time to look after production.

L. H. PRITCHARD, master mechanic, Pacific Mills, Columbia, S. C.: What do you find about lubrication—do you find that a fixed trouble—that is, do you find that that's the cause of most of your troubles—does that require the most maintenance?

MR. ELLIOTT: We found that we were putting new parts on machines, to build them up to do a good job, and, in no time at all, they were wearing out; and, upon investigation, we found dry bearings that were worn out, and we found lubricants that were not qualified to do the job. And, in this group of forms, we have tests; one man tests the oils, to find out the best lubricant to use on his particular place; and we put this lubrication control in there. If an overseer in the mill finds that a hot bearing lacks lubrication, he

brings it to our attention. In other words, the production man acts as an inspector. We are supposed to keep this machinery running like he wan's it run.

Superintendents' Discussion

Culver Batson in charge

CLARENCE O. SMITH, general overseer spinning, Marion (N. C.) Mfg. Co.: Speaking of the inspection, how many frames did he have to inspect daily?

MR. ELLIOTT: One spinner's side.

MR. SMITH: Do you have one for every spinner?

MR. ELLIOTT: No. He goes to one spinner today and the next tomorrow, and so on until he gets through.

MR. SMITH: Do the inspectors work on just one shift or on all three?

MR. ELLIOTT: Just on one shift.

MR. SMITH: If he found bad ends on a spinner today and repaired those ends, and from the time he left until the next day she had what we call broke-backs, who repairs those?

MR. ELLIOTT: The repair man fixes that.

CHAIRMAN BATSON: You have repair men in the spinning room and have a regular overhauler that goes around once a year. The repair men get around how often? Are they in there all the time?

MR. ELLIOTT: We have overhaulers once a year and then, following the overhaulers 45 to 50 days, have a maintenance man. He goes to the frame, stops it and checks it all over. He goes to six to eight frames a day. We fix the various things that cause ends to come down before they actually happen. Of course, these two men that we have who check the side with the spinner possibly find some things that the maintenance man or fixer does not see. A lot of times when an end comes down the fixer will not fix it. But this man stays there and analyzes the cause of that end coming down. I remember in one of our plants the spinner said one end had been coming down for four years, and no one had ever fixed it.

MR. HENDERSON: There might be some confusion about the term "repair man." He is simply a section man, an emergency man. He spends most of his time fixing brokebacks. If there is any other emergency during the time he is there he also attend to that.

T. W. BRIDGES, principal, North Carolina Vocational Textile School: Do you have specialized men in the weave room, too?

MR. HENDERSON: We have other men over the weaving. With 8,000 looms there, we felt we might have a weaving specialist. There are five different specialists in the weave room—five different groups of specialists. Most of them work on the first shift. They do certain jobs. For instance, the parts of the loom that complement each other and work together are inspected at regular intervals and kept in repair. The regular loom fixer takes care of more machines, because these specialized men prevent a great many of the breakdowns that ordinarily happen. That system is working out pretty much the same as the carding and spinning maintenance system.

CHAIRMAN: Mr. Elliott, how do you arrange it to have

an oiler going down an alley and working both sides of the alley?

MR. ELLIOTT: When we installed the oil lines we used 1½-inch pipe and brought the pipe up through the creel board and put a yellow cap on it. We put the oil cup on one side of the frames on one side of the alley and on the other side of the frames on the other side of the alley, so the oiler can oil both while he is going down that alley. That has increased the efficiency of the oilers very much.

CHAIRMAN BATSON: How does this system work in a small mill?

MR. HENDERSON: You have to do more combining in a small mill. I was superintendent of a small mill in Georgia at one time. You cannot have one man look after the rolls all the time, for instance, because he would be idle at times. He might look after rolls and belting and some other specialized jobs. It takes a little ingenuity, but it can be worked out and can be done just as well. You will find that you will change it as you go along; you make changes and adjustments.

W. N. WILLIAMS, general superintendent, Rex-Hanover Mills Co., Gastonia, N. C.: If you had three small mills all in the same yard and the same maintenance men working in there, do you think it would work?

MR. HENDERSON: I do not see why it'shouldn't. From my experience with it I think it can be applied in any mill, large or small.

CHAIRMAN BATSON: Mr. Henderson, do you think the results you have had so far have sold the idea to your overseers?

MR. HENDERSON: If they find anything wrong with it—and they do, frequently—they are invited to criticize it. That has been very helpful. We try to get them to criticize constructively, and they do. Their co-operation is very good, and they are working right along with it.

CHAIRMAN BATSON: What I meant was that the overseer of carding can spend most of his time on production and on labor and handling his help, and the maintenance department keeps the machinery in proper shape for him to run.

MR. HENDERSON: If he is getting better results he will be sold on the idea. He is getting production.

MR. HENDERSON: That is right. I do not think we have a single overseer, and we have a right large group up there, that would even talk about going back to the old way.

ROBERT A. MORGAN, textile engineer, Moore, Thies & Morgan, Charlotte: Mr. Henderson, do you have a centralized machine shop or several smaller units?

MR. HENDERSON: We have a centralized shop.

MR. MORGAN: All of your repairs are carried to the central shop—major repairs?

MR. HENDERSON: Right. We have in the Dan River division a major shop that does the work for that whole division and a big part of the work for the whole corporation. They have a small shop at the Riverside division, which is roughly half the size of the shop at Dan River.

Mr. Morgan: Do you have a centralized supply room or a supply room for each department?

MR. HENDERSON: A centralized supply room, but in the weave room—each of the four weave rooms—we have a sub-store right in the center of the room.

MR. MORGAN: I should like to say, Mr. Chairman, that I have operated under a system somewhat similar that did not go quite as far as Mr. Henderson and Mr. Elliott have outlined. We did have a central service department that was concerned with, for example, maintenance of the building, repairs of the building, service to the toilet facilities, scrubbing floors, washing windows, and rendering that kind of service that was common to all the departments. Then we carried it still further, to such things as humidity, electric light and power, water, heating, ventilation, etc.; and the overseer would be relieved of those details in his particular room. We carried it that far and considered going further with it. I think this is applicable to any cotton mill of any size, and especially to the larger ones.

JOHN M. CAUGHMAN, general superintendent, Spartan Mills, Spartanburg: I wonder if the gentleman would show the lines of responsibility, beginning with the superintendent and going down to the head oiler, or whatever you term the maintenance man.

MR. HENDERSON: Suppose I start with myself. I am in charge of this division as general superintendent. I have one man in charge of all carding and spinning and dressing, through the spoolers.

CHAIRMAN BATSON: That is a production man?

MR. HENDERSON: Yes, a production man. Then I have another man in charge of all slashing, drawing-in, tying-in and weaving. We have inspection departments, two of them. One inspection department inspects the fancy goods; and the other inspects the plain goods, sheetings and so on. Then we have carding and spinning maintenance, and we have loom maintenance.

The superintendent of carding and spinning has some five card rooms, seven spinning rooms, and two dressing rooms under him. The superintendent of weaving has four big weave rooms, with about 2,000 looms in each, about half of them fancy and half plain. He also has the slasher rooms and drawing-in and tying-in rooms. The third man has all inspection of the cloth. The man at the top, between the division superintendent and the department superintendents, is called the manager. He has four department superintendents, or he has five now.

OPERATING SET-UP AT DAN RIVER DIVISION RIVERSIDE & DAN RIVER COTTON MILLS, INC.

(Diagram shows relation of operating executives to maintenance department)

RAYMOND E. HENDERSON, SUPERINTENDENT

ASSISTANT SUPERINTENDENT

Carding and Spinning Maintenance (C. C. Eillott)

Carding and Spinning Maintenance (C. C. Eillott)

Carding and Picking Spinning And Lubrication Shops

QUESTION: What is the relation of those production men to your maintenance department?

MR. HENDERSON: Well, they are co-workers. Mr. Elliott is the service department. He has to please these five men. They have no authority over him, but if they do not like his work they can get something done about it very easily. In picking a man for this job it is important to have a man who is by nature co-operative and helpful and who is an easy man to get along with. You cannot have a man on this job who is arbitrary.

The carding and spinning department superintendent has five men under him. Each of the first four is over a mill, Number One, Number Two, Number Three and Number Four; and the fifth man is superintendent of spooling and warping. Each of the first four has two overseers—an overseer of carding and an overseer of spinning. This dressroom man has two—an overseer of spooling, warping and winding, and an overseer of twisting. The weave room has a similar organization.

MR. CAUGHMAN: I still do not get the connection. I wanted to find out, when a job is to be done, who okays it and then finally passes on it. This overseer, now, is in the spinning room. It is time for oiling and time for the maintenance program to go into operation. How does it go into motion?

MR. HENDERSON: Of course, you have these men working in that department all the time. They are under the constant surveillance of the overseer. On his rounds through the room, if they are not working satisfactorily, he reports to Mr. Elliott.

MR. CAUGHMAN: The overseer reports to the superintendent, and he reports to the manager of the department?

Mr. HENDERSON: Yes.

Mr. CAUGHMAN: He reports to him, then, that that work is not right or not satisfactory?

MR. HENDERSON: The way it generally works out is that the overseer of the spinning room, say, on his rounds finds something he does not like. He immediately gets hold of the working foreman on the job and says: "John, I don't like that. I want it done this way." If John has no disagreement he does it that way; if he has, he goes to his superior. Then that superior and the superintendent of the department agree on what should be done. We have been very pleased with the way it has worked out. It sounds a little top-heavy, and it is hard to explain it to a group, but actually it is quite simple in operation.

MR. MORGAN: Does that overseer make requisitions for work to be done, or is that regularly scheduled?

MR. HENDERSON: I would say 90 per cent of our work is regularly scheduled and he does not need to make requisitions. If the number of yarn is changed and the pulleys have to be changed, etc., he does make requisition. But 90 per cent of the work is just routine work for which there is no requisition. I will let Mr. Elliott describe his department for you.

MR. ELLIOTT: I begin with the opening room. There is a carding and picking overseer, and his duties are to the spinning. Under him are working foremen, one of whom is over the cards. He has a regular crew, and all he does is worry about the cards. This—(Continued on Page 38)

Processing Wartime Cotton Goods to Meet Military Requirements

By L. M. RICHARDSON

TEARLY every plant producing herringbone twill uses a different method in preparing gray goods for dyeing and finishing. There are many difficulties in the dyeing and finishing of this type fabric, due mostly to the weight and the twill weave. It is an 81/2-ounce fabric with a warp construction-40 ends and filling 36 picks, and a 36-inch width. Thus special care must be observed in each operation to avoid breaks in the fabric. In order to do this the cloth must be kept in open width throughout the finishing

plant.

The gray goods are removed from bales and loaded on skids or in open width wooden boxes, with loose ends sewed together on a machine which produces flat seams. Flat seams are recommended because seam marks are avoided whenever the cloth is wound in rolls. After loose ends are sewed together and the boxes or skids are filled with one continuous length of cloth, singeing and desizing follow. Singeing and desizing is accomplished in one operation, the cloth passing through a flame on the singeing machine into and through a desize mix, over a reel into a wooden box. For a 100-gallon desize mix use four to six gallons of malt type desizing agent and one-half gallon of wetting agent which will not destroy the enzymeatic desizing action. Heat water at 120° F. before adding malt type enzyme, and do not add any live steam after this.

When employing the animal (pancreatic) type of desizing agent instead of a malt enzyme use one-sixth the amount. It is optional as to how long the desized goods must stand before being boiled off for dyeing. Some dyers think six to eight hours is best, others three to four. But no matter how long the desized goods stand, always keep the goods wet out. You can do this by spraying regular tap water over the goods while in their respective boxes. If the goods dry out along the selvages or other spots in the fab-

The processing of military cotton goods

ric, the result will be poorly dyed cloth with light spots. These spots and light selvages are due to lack of proper solubilization of sizing and removal during the scouring off operation. Before the cloth is boiled off the dyer must have it on a wooden shell in roll form with about 750 yards per roll. One of the best ways to get the cloth in roll form is to run it through a padder mangle and clock the cloth so as to have as near to 750 yards as possible. It is a very good idea while beaming the cloth in the above manner to run it through a one per cent mix using some kind of fatty alcohol at 160-180° F. This removes the dirt as well as the converted starches before the fabric reaches jigs for the regular boil-off. It also saves time during scouring and wetting.

Two Jig Boil-off Methods

There are two methods of boiling off at the jig. In the first (75 gallons), give eight ends at boil, using two pounds of caustic flake, one-half pound of neutral soap, one-quarter pound of soda ash and one-quarter pound of wetting agent; then drop ready for wash. In the second method, give six to ten ends according to condition of goods, using four per cent liquid caustic (wash water from mercerizing range can be employed), 0.3 per cent alkali resistant wetting agent and 0.1 per cent synthetic detergent.

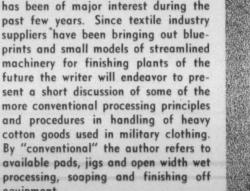
In jig-reduction dyeing, give the boiled off goods two ends at boil; drop; give two ends at boil using one-half pound of fatty alcohol; drop; give one end at 130° F. with hot water; then enter vat color paste, caustic and hydro in order listed. Two vat color combinations suitable for dyeing No. Seven and No. Eight olive drab shades by jigreduction are: (1) 9.9 oz./gal. Vat Khaki 2G Paste, 0.72 oz./gal. Vat Olive Green B Paste, 7.3 oz./ gal. Vat Olive R Paste, caustic and hydro; (2) 6.0 oz./gal. Vat Khaki 2G Paste, 3.85 oz./gal. Vat Olive Paste, 4.9 oz./gal. Vat Brown

AG Paste, caustic and hydro.

Some dyers prefer to use a penetrant in the reduction bath so as to create light suds on bath; they contend that this helps to keep the goods free from dirty speck marks during the bath. Dyeing by this procedure usually requires ten to 15 ends. Upon completion of dyeing, drop, run cold wash one end, then chrome and acetic at 140° F. for four ends. In most plants the goods are then run on to a shell and soaped off on an open width soaper where they are given a finish on a quetsch.

If the goods are to be finished wet, blend a 200-gallon mix using 80 pounds of sulfonated castor oil, tallow, etc., and pad on quetsch at 140-160° F. Some plant operators prefer to use a mixture prepared especially to give the dyed and dried goods better rewetting—(Continued on Page 46)

suppliers have been bringing out blueprints and small models of streamlined machinery for finishing plants of the future the writer will endeavor to present a short discussion of some of the more conventional processing principles and procedures in handling of heavy cotton goods used in military clothing. By "conventional" the author refers to available pads, jigs and open width wet



FOR FASTER, EASIER, MORE
ACCURATE AND ECONOMICAL
ALIGNMENT REAMING

PATENTED DUAL-SPIRAL EXPANSION REAMER

Whether your jobs require hand-reaming, or machine-reaming, there's a Lempco Dual-Spiral to fit your needs. Extensions and pilots can be made to almost any lengths. Right-hand flutes on two blade segments spiral counter to left-hand flutes on the third blade segment, simultaneously. Satinsmooth finishes are produced in any machinable metal or plastic. The unusually large expansion range enables a Lempco Dual-Spiral to finish-ream as many different size holes as would ordinarily require 6 to 8 conventional expansion reamers. Blades may be adjusted to .005" less than standard on smaller sizes—on larger sizes .010."

- ★ .035" to .080" Straight Line Expansion.
- ★ Blades May Be Resharpened 8 to 10 Times.
- ★ New Blade Segments May Be Inserted in Thirty Seconds.
- ★ Five Different Types Available.



AVAILABLE INDIVIDUALLY OR IN BOXED SETS SPECIAL REAMERS
DESIGNED TO
SOLVE YOUR
REAMING PROBLEMS
SEND BLUEPRINTS

WRITE FOR FULL DETAILS

LETTE

5491 DUNHAM ROAD, BEDFORD, OHIO

Processing Wool with Cotton Machinery

By W. TABOR ROBINSON

THE drawing phase of operation in processing cotton Although many mills regard the use of steam as impractical fibers, 100 per cent wool fibers, or blended fibers of wool and rayon appears to be very simple. The mechanism of the drawing frame is of very simple design. This, added to the fact that an operative can be trained in a very short time to run the stock through the machine, often leaves the impression upon the operative that the manner in which the operation is completed is of little importance. Such an erroneous conception of the operation commonly results in its completion with far less care than a correct procedure would require.

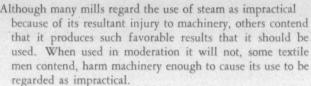
Textile men of practical experience express the common opinion that many troubles could be eliminated in subsequent processes by assuring that the drawing operation is completed correctly. These men agree, too, that any additional operating cost caused by the insistence of care in performing this operation will be repaid amply by the favorable effects resulting to post-drawing operations.

Humidity and temperature are important factors in the drawing process. These demand more attention, perhaps, in processing stocks containing wool than in all-cotton materials. This is true, obviously, because of the effect of humidity and temperature upon static. Troubles resulting from static are helped considerably by the maintenance of correct relative humidity and temperature levels. A relative humidity of approximately 60 per cent and a temperature of approximately 85° F. are considered correct for the drawing room. General weather conditions affect these tremendously, and for this reason a more strict regard should be given during weather changes than at other

Another reason for giving the factors of humidity and temperature serious consideration relative to the drawing process is that the maintenance of constant levels has a very favorable effect upon eliminating any tendency of the stock to choke the machine between calender rolls and coiler. It also makes the stock less brittle and for this reason keeps it in a more satisfactory working condition.

In discussing the factor of humidity and its relation to static caused troubles in processing woolen stocks through the drawing operation, it may be wise to consider the use of live steam as a means of lessening these difficulties.

> Mr. Robinson's last article relative to the running of wool or wool blends on cotton machinery was presented in the issue of Sept. 1. That article contained detailed information relative to the carding process; the current one deals with drawing. Again the author gives credit for valuable assistance to Authur Noles of Rhyne-Houser Mfg. Co. and C. F. Robinson of Howell Mfg. Co. at Cherryville, N. C.



Humidity valves should not be installed or used in such a way that they directly spray the drawing frames. A very successful method of using live steam in the drawing room is that of installing cocks through the floor, between the cans, back of the frames. The use of steam in this fashion keeps the vapor in a more constant contact with the stock and would, it appears, result in less harmful effect to the machinery. If used to excess, however, it would cause rust damage and affect unfavorably the health of the operative.

Breakage of Sliver

Often, a source of much trouble in the drawing operation is the breaking of the sliver before it passes through the sliver fingers on the back of the frame. This breakage is commonly caused by the use of improper methods of drawing the sliver from the cans. A very successful and practical means of lessening this difficulty is that of using a rod back of the drawing frame. The rod is placed in such a position that the sliver is drawn from the cans in a vertical position, passing across the rod before passing through the metallic sliver fingers. When such a rod is used it is imperative that its surface be smooth and polished to the extent that it will not retard in any way the dragging tendency of the drawing

It is also possible to use a roll similar to that employed on slubbers for the purpose of lifting the sliver from the can. This roll is constructed so that it is revolved by a sprocket chain attached to the mechanism in the drawing frame head. It is geared to turn at the speed necessary to supply the sliver from the can as the frame draws it into the frame rolls. Too, the use of such a roll, because of its uneven revolving surface, aids in lifting the sliver from the can, eliminating overstretch to the stock. When employed this lifting roll should be placed in such a position that it will assure as nearly as possible a vertical position of the sliver as it is pulled from the can.

Much of this breakage in the sliver is caused by the use of broken-top or rough-top cans. Cans should be carefully inspected for rough tops or bent sides. A thorough examination of a bent can will often reveal a broken place in the can surface. Such a broken place will invariably hang the sliver—with resultant tearing or breaking. The use of cans equipped with spring bottoms is most commonly recommended as best to use with drawing. The spring bottom pushes the sliver upward in the can as it is used.

The general operating condition of the drawing frame should be kept in the best possible order. Cleanliness is

essential to successful operation. All parts of the machine should be cleaned regularly and often. Metallic surfaces that directly contact the stock should be kept well polished. All bearings and moving parts of the machine which are subject to rather high speeds should be oiled daily. The metal fingers through which the sliver passes and the sliver spoons should receive periodical inspection to ascertain that they are clean and properly balanced. In changing stock on the machine the sliver spoons should be adjusted to allow correct space for the passage of a heavier or lighter sliver.

Careful attention should be given the matter of selection and to that of maintenance of the drawing frame rolls. Though a number of different type rolls may be used, leather top rolls are accepted by most textile men as the best type for satisfactory operation, especially in processing woolen stocks. Some of these men contend that static troubles are helped definitely by the use of the leather rolls. Metallic and composition rolls are used, however, to a great extent. Regardless of the type rolls employed they should be inspected weekly. The leather top rolls often become soft or uneven. When found in such condition these should be replaced immediately by new ones. Rolls that show evidence of uncommon wear should be given a new coat of varnish before further use.

When metallic rolls are used they should be scoured thoroughly once each month. At less widely spaced intervals these should be inspected for dirt which might accumulate in the roll flutes. All roll bearings should be cleaned regularly and kept well oiled. A worn bearing should be replaced immediately by a new one. This consistent care of the roll bearings increases the assurance of an even and perfect operation. The top rolls should be sized to assure a uniform operation. A roll gauge or veneered calipers can be employed successfully for this purpose.

Adjusting the Drawing Frame

In processing stocks consisting of all or part wool, a longer draft than six is seldom used with any degree of success in the drawing operation. The adjustments of rolls are usually determined by experience. The staple lengths of materials to be processed is the factor that will determine these adjustments. Some mills adjust the drawing rolls so that the distance from the inside-center of each roll to the corresponding part of the next are: from front to second roll $\frac{3}{16}$ inches greater than the staple length of the stock; from second to third roll $\frac{5}{16}$ inches greater; and from third to fourth roll $\frac{9}{16}$ inches greater. Success of operation and consideration of production quantities are the factors that should determine the speed at which the drawing frame should be run.

Top roll clearer waste should be removed regularly and often. Hourly is not too often for this. It is important that the clearer should be kept in good condition. If damaged or soiled by oil it should be exchanged.

Care of the coilers should be regarded as a very important phase of the operative's work. These should be kept clean and well oiled. In processing many types of stock it is advisable to use larger than standard size coilers. The use of the correct size coiler aids in eliminating troubles so often caused by choking just before this point.

Can tables upon which the cans revolve at the front of the drawing frame should be perfectly level. It is not uncommon for waste to accumulate sufficiently in the gears of

Calco Announces New Method For Reducing Wool Shrinkage



Reduction of shrinkage through the use of a melamine resin recently introduced by the Calco Chemical Division of American Cyanamid Co. is graphically illustrated by comparison of the two samples of wool yarn above. The wool at left was given a "Lanaset" application, the other was untreated. Calco states that "Lanaset," incorporated directly in the wool fibers, provides protection which permits repeated laundering and dry cleaning without appreciable shrinkage. This new resin treatment has already been used by the Army in processing over three quarters of a million yards of wool sleeping bag fabric and is said to have been tested with complete success by leading textile organizations. Of particular interest is the simplicity of the application—fabric is simply passed through a water bath containing the resin, squeezed through a mangle, dried. Cured and rinsed. The method of applying "Lanaset' is described in U. S. Patent No. 2,329,622, issued to American Cyanamid Co.

these tables to prevent adequate oiling. Worn gears of these platforms will cause uneven and jumpy operation. The operative should be instructed to doff the cans often enough to prevent their becoming too full.

Sufficient care should be given the trumpets to assure that all trumpet holes are of uniform size and that they are kept well polished. Stop motions of the drawing frame should be kept in perfect order. This lessens the likelihood of permitting singlings to be run in operation. The drawing sliver should be sized often. By weighing at regular and not too widely spaced intervals, any variances in weight will be noticed early enough to allow the correction of any irregularity that might cause the variations.

Operatives should be trained thoroughly in the duties involved in a successful drawing operation. They should be taught especially to regard the maintenance of the machine as a phase of duty which is of extreme importance. Instructions should be given them to handle the stock with care; and they should be taught that a diligent attitude toward their work assures better production in later processes as well as in the operation with which they are directly responsible.



Member of
Audit Bureau of Circulations and Associated Business
Papers, Inc.

Published Semi-Monthly

CLARK PUBLISHING COMPANY Offices: 218 W. Morehead St., Charlotte, N. C. Eastern Address: P. O. Box 133, Providence, R. I.

David Clark - - - - President and Editor
Junius M. Smith - Vice-President and Business Manager
F. R. Carey - - - Vice-President
James T. McAden - - - Associate Editor
Maj. Ellis Royal (On leave in U. S. Army) - Associate Editor

SUBSCRIPTION

SUBSCRIPTION	
One year payable in advance	\$1.50
Other countries in Postal Union	3.00
Single copies	10

Contributions on subjects pertaining to textile manufacturing and distribution are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

\$631,000 Given Textile Foundation

Up to Dec. 1st contributions received by the North Carolina Textile Foundation, Inc., had amounted to \$631,000 and those behind the project were optimistic about reaching the goal of \$700,000 before the end of the year.

While there are a few mills whose fiscal year does not coincide with the calendar year, most fiscal years end Dec. 31st and contributions made on or before that date can be deducted on Federal and state income tax reports for 1944.

As there is but a month remaining in which to reach the goal of \$700,000, if it is to be reached before the end of this year, and because we feel that the establishment of a higher type of textile education will have much bearing upon the future of the textile industry of the South, we feel justified in again urging mills to make donations while they are still in high tax brackets.

Our remarks and our urging applies equally to the Educational Foundation of Georgia, which will support textile education at Georgia Tech, and the J. E. Sirrine Textile Foundation of South Carolina, which although not definitely committed to the support of textile education at Clemson College, will probably use its funds for that purpose.

We wish to see three well equipped textile schools, each with a staff of men not only capable of training young men for the industry but also capable of doing research and development work in textiles.

North Carolina, unlike South Carolina, Georgia and Alabama, has a large and growing knitting in-

dustry and realizes the need of training young men for the operation of knitting mills and for research in that field.

Many textile schools have had knitting departments equipped with a few machines and have given some textile students smattering instruction in knitting, but there has never been a strong department of knitting in any textile school or any place to which a knitter could send his son or some other young man and have him well trained for the operation of a knitting mill.

Research in knitting and knitted fabrics has been upon such a limited scale that it can almost be said that none has been attempted.

Knitters in North Carolina, Virginia and east Tennessee are enthusiastic about the establishment of a strong knitting department and are contributing very liberally to the North Carolina Textile Foundation, Inc.

Several meetings of prominent knitters have been held at Greensboro, N. C., and committees have been appointed to make out the list of seamless and full-fashioned machines which are to be installed in the textile school. It is now assured that at least one of each of the latest type of seamless and full-fashioned machines and auxiliary machines will be installed.

P. H. Hanes of Winston-Salem, N. C., has his organization making out a list of the underwear and outerwear machines and auxiliary machines which are to be secured and a committee is deciding upon the tricot machines.

It is now believed that the funds available will be sufficient to also secure braiding machines, knitting looms and many specialty machines.

The funds of the North Carolina Textile Foundation, Inc., will not be used for equipment but to make it possible to secure outstanding and experienced men to teach all phases of textile manufacturing, including knitting, and to carry on knitting research.

Although a knitting school is something entirely new, knitters, even those operating very small plants, seem to see the possibilities and what it will mean to the future of their industry.

Many industries, realizing that their prosperity depends upon the prosperity of those to whom their product is sold, spend large sums to improve the operating methods of their customers, but with few exceptions, manufacturers of carded and combed yarns for the knitting trade seem to be entirely uninterested in developments which will mean better and more efficient operation of the mills to whom they sell.

Now having more orders than they can fill, many seem to have entirely forgotten those pre-war years when they were forced for considerable periods to operate upon reduced schedules, sometimes as low as 50 per cent of normal.

Many seem to be entirely oblivious of the increase

in the consumption of rayon and other synthetic fibers or to realize the competition which carded and combed cotton yarns are certain to have in post-war days.

There are some combed yarn spinners who are keenly alive to the dangers ahead but there are too many who, because orders are plentiful today, prefer to slumber.

We are certain that the textile industry will need more and better trained textile school graduates to meet conditions which are almost certain to arise in cotton yarns and fabrics and we definitely see the need for the better operation of knitting mills and for knitting research.

We therefore urge mills to make donations to the foundations which have been organized to improve textile education.

Donations can be made today and deducted on Federal and state income tax returns.

Tomorrow the men trained as the result of such contributions may make profits possible where otherwise there will be no profits.

The Meaning of the Election

New Dealers and extreme liberals are trying hard to use the recent national election to consolidate their gains.

They are telling people that the election was a decision in favor of New Deal and radical policies and that they should now be accepted and incorporated as our future form of government.

No analysis of the recent election confirms any such position. In fact, although Roosevelt was elected, he had very narrow margins in many states and his majority measured on the vote of the people was the smallest he had ever received.

North Carolina gave Dewey 262,155, which was the largest vote ever given a Republican candidate except Herbert Hoover in 1928, and that vote was based upon religious prejudice against his opponent rather than any desire for the election of Hoover.

The Roosevelt majority in North Carolina was this year 265,244 as against 395,382 in 1940 and 392,858 in 1936.

With a drop of approximately 130,000 in the vote for Roosevelt, it is difficult to show that in North Carolina at least there has been any acceptance of New Deal policies or extremely liberal views.

It is our opinion that President Roosevelt owes his re-election to a belief that he, Churchill and Stalin were jointly in charge of the war effort and that should Roosevelt drop out, it would require some time for Dewey to gain the inside information and the prosecution of the war thus might be retarded.

Many thousands who were definitely against the New Deal and would have voted against Roosevelt, were afraid to take the chance that Dewey could step into the picture and have the same relations with Churchill and Stalin as that which Roosevelt is supposed to have.

The New Dealers and the extreme liberals are urging people to consider the election as a decision in favor of their policies but no analysis of the returns justifies any such claim.

The Anderson (S. C.) Independent, whose publisher has been appointed to fill the unexpired term in the United States Senate of the late E. D. Smith, says editorially:

The CIO's Political Action Committee, having won a fine start, is going to take advantage of what it gained at the last election and continue to spread its Communistic doctrines all about the countryside.

Already it is looking forward to the 1946 Congressional elections.

The CIO gave the political gang, headed by Sidney Hillman, a pat on the back at its Chicago convention the other day and told them to go as far as they liked.

Hillman said the PAC was looking forward to 1946 when it will receive a real test of its strength.

The editorial of the *Anderson Independent* certainly does not seem to indicate that the people of South Carolina will bow their necks to the yoke of Sidney Hillman and Harry Hopkins, and it would not surprise us to see a revolt in that state if the New Deal leaders attempt to dictate to them.

The war should be over before the next national election and when people can vote their convictions without thinking about their sons and brothers who are in the fox holes, there may be a rude awakening for New Dealers.

The Erlanger Scholarships

Milton and Sidney Erlanger of New York and their sister, Mrs. Allison Stern, have done a fine thing and set a fine example in establishing four textile scholarships, for sons or daughters of their employees, in the school of textiles at North Carolina State College.

They wished to honor their father, Abraham Erlanger, and their uncle, Charles Erlanger, who jointly established the manufacture of woven athletic underwear under the B. V. D. brand name, and revolutionized the underwear industry of America. They also wished to make it possible for the brightest boys and girls of their plants at Lexington, Salisbury and Forest City, N. C., to acquire textile educations.

They were influenced to select North Carolina State College because of the plans of the North Carolina Textile Foundation, Inc., to which their mills are contributors.

They have deposited with the college \$67,000 in government bonds and estimate that the interest upon the bonds will provide four \$400-per-year scholarships, one to be available each year.

IIILL IILWS

ROCKINGHAM, N. C.—Hannah Pickett Dyeing and Finishing Co. has been chartered to engage in dyeing and finishing under authorized capital stock of \$500,000. Stock to the amount of \$500 has been subscribed by W. B. Cole, Mrs. Elizabeth L. Cole and John W. Patterson. The new company will process the output of Hannah Pickett Mills, of which Mr. Cole is board chairman and Mr. Patterson general superintendent.

KANNAPOLIS, N. C.—Fifteen hundred veteran Cannon Mills Co. employees from the North Carolina towns of Kannapolis, Concord, Mount Pleasant, Rockwell, China Grove and Salisbury and from York, S. C., will gather at Kannapolis Dec. 19 for the company's annual loyalty banquet. Workers to be honored will be those who have served the various plants for at least 25 years.

SPRAY, N. C .- The Marshall Field & Co. retirement program affecting workers in textile plants of the company's manufacturing division at Spray, Leaksville and Draper, N. C., and Fieldale, Va., has been approved by the Treasury Department. The benefits provided by the program, when added to Federal social security payments, average between 40 and 58 per cent of pre-retirement income for employees with 20 years of service. Benefits increase as length of service increases beyond 20 years, and in certain cases may reach as much as 70 per cent of pre-retirement income. The program approved by the Treasury Department consists of two parts, a pension and an annuity plan. Substantially all regular employees of the company are automatically covered on a service basis by the pension plan at no cost to the employee. Regular employees with established incomes above \$3,000 a year may elect to take part in the annuity plan under which they share the cost with the company. Virtually all eligible employees have elected to participate in the annuity plan.

LYNCHBURG, VA.—The first issue of Consolidated Textile News, new house organ of Consolidated Textile Co., Inc., was distributed to employees last month. The initial number contained eight pages of information about war uses of the company's output, employee and plant activities. A number of pictures taken at the mill were reproduced.

DURHAM, N. C.—Minute Man Flags were awarded Nov. 28 to the four Durham plants of Erwin Cotton Mills Co. The pennants are presented by the Treasury Department to organizations having 90 per cent or more of employees regularly buying war bonds, Maj.-Gen. William C. Lee, paratroop officer, made the principal address at the presentation ceremony.

SENECA. S. C.—A transaction now under consideration would place the Seneca plant of the Lonsdale Co. of Rhode Island, along with other Lonsdale properties, under control of a trust headed by Royal Little of Providence, R. I. Holders of some 85 per cent of the company stock have indicated that they will accept the offer of some five and one-half to seven million dollars. If new ownership is established the plants will be kept in operation with the present name and personnel. The Seneca plant has 40,000 spindles and 1,000 looms on print cloth production.

CHERAW, S. C.—Cheraw Cotton Mills has been accused by the War Production Board of diverting 126,831 pounds of yarn to unrated orders. WPB officials have directed the company, which manufactures hosiery yarns, to set aside that amount of its production by the end of January, 1945, for alleged "willful violations" of Conservation Order M-317. The violations were said to have occurred in the first quarter of this year. The effect of the order, WPB stated, "will be to put additional yarn into the war effort by requiring it to be delivered to customers with rated orders."

Scholarships Honor Erlanger Brothers

I N memory of Charles and Abraham Erlanger, the family of these two pioneer manufacturers of woven underwear has established the Erlanger Scholarships at North Carolina State College, Raleigh, for the benefit of sons and daughters of textile workers in four of the family plants in North Carolina.

A fund totaling \$67,000 for the scholarships has been provided by Milton Erlanger, Sidney Erlanger and Mrs. Allison Stern.

Money provided by the Erlanger family will make possible the annual award of a four-year scholarship at the school of textiles of North Carolina State College. The award under each scholarship will provide \$1,600 covering the four-year tenure, sub-

ject to the maintenance of high standing by the recipient as a student. Payments of \$400 toward the student's expenses will be made annually; the college and donors expect that the scholarship winners will earn the remaining \$200 of their expenses each year either by work during summer vacation or during the college year. Any son or daughter of an employee of Erlanger Mills, Inc., at Lexington, Alexander Mfg. Co. at Forest City, or North Carolina Fabrics Corp. and North Carolina Finishing Co. at Salisbury, will be eligible to compete for an Erlanger Scholarship upon graduation from high school.

A selection committee consisting of school superintendents at Lexington, Salis-



Abraham Erlanger



Charles Erlanger

bury and Forest City, representatives of the mills, the executive officer of the B.V.D. Corp. in charge of textiles, and the dean of the school of textiles, will designate each year one son or daughter of an employee in each of the four plants; a scholarship winner will be selected by college officials from among the four nominees.

After GERMANY there's still JAPAN



KEEP BUYING WAR BONDS

KEEP ALL THE BONDS YOU BUY

A VEARS OF STARCH SERVICE

STEIN

MADISON AVENUE - NEW YORK 17, N. Y



TEXTILE STARCH FOR EVERY TEXTILE PURPO







TEAMWORK WINS

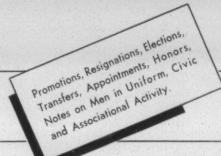
Close-knit teamwork scores goals wins games

Team up with the Corn Products technical staff...always at the service of the textile industry...ready to assist manufacturers with their textile problems.



CORN PRODUCTS SALES COMPANY
17 Battery Place New York 4, N. Y.

Greenville, S. C. Spartanburg, S. C. Greensboro, N. C. Birmingham, Ala. Atlanta, Ga. Boston, Mass.



PERSONAL NEWS

Harold F. Ray has become associated with Wickwire Spencer Steel Co. of New York in an executive accounting capacity.

J. M. Bounds has retired as superintendent of winding at Southern Worsted Mills, Minter, S. C., after holding the position for some 20 years. He was previously with Cannon Mills Co. at Kannapolis, N. C.

Emmett J. Driscoll, recently resigned from Sayles Finishing Plants, Inc., is joining the executive staff of the Turner Halsey Co., New York, it has been announced. For some time Mr. Driscoll has been interested particularly in the development of the processing of synthetic fibers and the application of plastics and of chemical research to finishing processes. He is chairman of the New York section of the American Association of Textile Chemists and Colorists. He entered the Sayles organization in 1922 after active duty as an officer in the U. S. Navy.

Oliver H. Clapp, a vice-president of Stein, Hall & Co., Inc., New York, manufacturer and distributor of starches, gums and dextrines, is spending four or five months in Brazil on a business trip.

Arnold, Hoffman & Co., Inc., manufacturing chemists with headquarters in Providence, R. I., has announced the appointment of Jeffrey B. Henriques as vice-president in charge of purchasing and sales for Arnold-Hoffman Co., their new industrial chemical sales division. Soon after the first of the year new offices will be opened on the 51st floor of the Empire State Building, New York City, to accommodate both the present manufacturing sales division and the new heavy chemical organization. For the past 12 years Mr. Henriques has been general purchasing agent for the United Merchants and Manufacturers Management Corp. and is widely known in the trade.

William H. Entwistle has succeeded his father, George P. Entwistle, as president of Entwistle Mfg. Co. at Rockingham, N. C. The elder Mr. Entwistle has become chairman of the board.

Julian C. Frankel, formerly with the sales staff of the Goodall Co., is now sales and advertising manager of the American Safety Table Co., Reading, Pa. Mr. Frankel is a native of New York City and received his B.S. degree in commerce from the University of North Carolina where he was an outstanding athlete. While with the Goodall Co. the past ten years, he has also made an enviable record as an amateur golfer.

C. Robert Fay has been appointed comptroller of the Pittsburgh Plate Glass Co., succeeding Stuart M. Campbell, resigned. Mr. Fay has been secretary of the policy committee on War Contract Terminations for Westinghouse Electric & Mfg. Co. since he returned last August after serving as consultant to the War Production Board on the Controlled Materials Plan.



After some absence from the pages of Textile Bulletin, we give you in the photograph above Maj. B. Ellis Royal, on leave to the Army from his duties as associate editor. Since last reports Major Royal has received a promotion to his present rank, has been to England and has done considerable fishing — witness the nice catch. His duty overseas was in connection with the invasion of the French coast, and Major Royal is now able to say that he has returned to his permanent station at Boca Raton (Fla.) Field, where he is commanding a section of 1,200 men in the Army Air Forces Technical Training Command School. The picture above was taken in the Everglades of Florida; the boat is a flatbottom craft with airplane propeller. He reports that his wife and two daughters are with him and "as you can see, I am still not thin, but I can do a 25-mile hike without too much suffering."

John F. Van Ness has resigned as head of the cotton price section of the Office of Price Administration to return to private industry.

The National Industrial Information Committee of the National Association of Manufacturers has announced the appointment of William R. Darragh as regional manager of the N.I.I.C. program for Virginia, North and South Carolina, Tennessee, Mississippi, Alabama, Louisiana and Georgia. Mr. Darragh's office is located at 817 W. Peachtree, N.E., Atlanta 3, Ga.

John Simonds has joined the sales promotion department of Interchemical Corp. at New York, where he will assist in expanding the firm's marketing program.

Stuart W. Cramer, Jr., president of Cramerton (N. C.) Mills, is among a group of six American war production executives now in the European theatre observing the handling of supplies and military needs. Brig. Gen. Albert Browning of the Army Services of Supply is in charge of the group.

J. C. Thom has been appointed manager of sales for Westvaco Chlorine Products Corp., New York, effective Nov. 15, according to an announcement by Louis Neuberg, vice-president. Since August, 1943, Mr. Thom has been Westvaco's acting manager of sales.

F. H. Ernst, manager of the Du Pont rayon plant at Old Hickory, Tenn., since 1937, has been appointed assistant production director of the rayon division of E. I. du Pont de Nemours & Co. He has been succeeded at the Old Hickory plant by E. E. Swensson, until recently on special assignment with the explosives department. Mr. Ernst was educated at Carnegie Institute of Technology and began work with Du Pont in 1915, going to Old Hickory in 1925. Mr. Swensson joined the Du Pont organization in 1928 at Old Hickory. Three managerial changes in the sales organization of the Du Pont rayon division were announced late last month. Robert G. Potter, district sales manager at Philadelphia since 1941, will be transferred to Wilmington as manager of staple sales. He will be succeeded by D. L. Lewis, Jr., who was transferred from the explosives division Nov. 1. T. K. Woods, transferred from the cellogiane division, will be in charge of district sales for rayon staple at New York.

Scott Russell, former president of Bibb Mfg. Co. at Macon, Ga., has resigned as general manager of the Aeronautical Chamber of Commerce, Washington, D. C. Officers of the organization said Mr. Russell gave ill health as the reason for his resignation.

Secretary of the Treasury Henry Morgenthau has assigned John W. Pehle, assistant to the secretary, supervision over the treasury's procurement division. Mr. Pehle succeeds Ernest L. Olrich, who has returned to active duty as president of Munsingwear, Inc., of Minneapolis, Minn.

-(Continued on Page 40)

Houghton Wool Tops

PROMPT SHIPMENT ALL GRADES ON SHORT NOTICE

SUITABLE FOR BLENDS WITH RAYON OR COTTON

Write or Phone Our Sou. Representative JAMES E. TAYLOR Telephone 3-3692 CHARLOTTE, N. C.

houghton

WOOL COMPANY
253 SUMMER STREET * BOSTON

We've agot your SIZE!



 SEYCO size films are more pliable and elastic, resulting in better weaving. Try SEYCO and see for yourself.

SIZING ... PENETRANTS ... ALKALIS ...
SOFTENERS ... SHUTTLE DRESSING
"TWIST-SETTER" MACHINES





Released by the Army

Now Open Year Around

Riviera Hotel

GEM OF FLORIDA'S EAST COAST

NEW CABANA CLUB Open Nightly at Swimming Pool and Tennis Court

MUSIC ENTERTAINMENT RECREATION

Transportation Service for Guests -

Station Wagon will meet your train and make trips to the world's famous beach

Boat and Motor for Fishing and Pleasure

Write for Descriptive Literature and Rates

RIVIERA HOTEL

Box 747, Daytona Beach, Fla. HENRY H. HARDESTY, Manager

Notice—Several Hotel Positions Open—Write!

Discussion on Machinery Maintenance

(Continued from Page 27)—picking and carding overseer has another working foreman, who has all the roving and drawing. That gives the carding and picking man two assistants, or rather, since the mill is divided into two sections, he has four of those men. The spinning and twisting are divided out in the same way. Then we have a third department, lubrication, and a fourth, shops. That does not include our general machine shop but is very small. It is an auxiliary service show, like a roll shop or a band shop. The overseer of all lubrication has a man with approximately ten or 12 oilers, who takes care of all the lubrication except fast moving. He is a working foreman.

MR. CAUGHMAN: Suppose you have a card that is faced. Take that and trace it through. The maintenance department is not maintaining it, and the lubricating department is not oiling it.

MR. ELLIOTT: All right. Say the overseer has a card that is faced. It interrupts his production, and he is a production man. The maintenance man is supposed to catch that. This man here over the cards catches that, and it is refaced immediately.

MR. HENDERSON: The overseer of the department might be the first one to see it. He takes it up with the others, and they decide what to do.

MR. ELLIOTT: We want them to look at it in this way—that we are a service force to help them. We sell them service.

BYRD MILLER

WOODSIDE BLDG., GREENVILLE, S. C.

Representing in the Carolinas

BURKART-SCHIER CHEMICAL CO.

CHATTANOOGA, TENNESSEE

CHAIRMAN: Suppose those eight overseers and four superintendents have different ideas of what ought to be done, what the settings ought to be, what lubrication ought to be done, etc., what then?

shr

dis

me

80

ica

im

fo

a 1

re

th

ar

W

fi

MR. HENDERSON: I will answer that in this way. At regular intervals we have meetings of the operating group with the maintenance group. We save up those controversial questions for those meetings. These men discuss those questions, say card settings, and agree on standard settings for all points. If there is disagreement the majority rules as to what settings they will adopt. We had a controversy once about the type of spinning oil to use. Each man had his own idea. We got all the spinning men together with Mr. Elliott and his men, and I think maybe we got an oil man in, and discussed it and decided what to use in each department.

CHAIRMAN BATSON: Suppose some overseer has a wild idea. How do you work that out? Do you have a research department?

Mr. HENDERSON: We let them try anything they want to, in a limited way.

A. W. BENOY, assistant superintendent, Consolidated Textile Co., Shelby, N. C.: I don't know whether you brought out clearly how a complaint is handled. If a man has a complaint, does he handle that through channels all the way up to the top man and back down to the man who is responsible for the work, or does he handle it directly with the man responsible for the work?

MR. HENDERSON: He handles it, for the most part, with the man directly on the job.

Uses of Metal Hose Described

A 12-page pamphlet, "Flexible Metal Hose for Every Industrial Use," was recently made available by Chicago Metal Hose Corp. The booklet may be secured by writing to 400 West Madison Street, Chicago 6, Ill.



Basic Properties of Nylon Yarn Explained To Finishers

Basic properties of nylon yarn — elasticity, inherent shrinkage, and the ability of the fiber to take a "set"—were discussed by P. D. Atwood, manager of product development for the nylon division of E. I. du Pont de Nemours & Co. at a meeting of the New York section of the American Association of Textile Chemists and Colorists Nov. 17.

"Although the basic properties of the yarn originally indicated to us the importance of the control of shrinkage and elasticity factors, and pre-war small scale weaving experiments substantiated our theories," he declared, "it remained for the parachute program to bring out the full impact of their influence."

"As finishers," said Mr. Atwood, "you can benefit in at least four ways by a better understanding of shrinkage, as follows; you can arrange your equipment and procedures in a more logical manner, particularly with regard to the interrelation of setting and shrinkage; experimental work, either theoretical or practical, can be outlined with greater assurance of improved methods if you understand how the fiber will react; it is vital for you to know what type nylon yarns a weaver is using in order to more effectively bring out the final properties or appearance he is seeking; as in the case of elasticity, you will be in a better position to deal with defects or variations which may occur and more rapidly introduce corrective measures whenever such may be necessary in either weaving or finishing."

"A finisher of nylon fabrics," Mr. Atwood pointed out, "must bear in mind the unusual property of nylon to take on a more or less permanent 'set' when subjected to heat, moisture and time. The most plausible explanation of this phenomenon is one of readjustment or realignment to a state of less strain on the part of the molecular structures which forms nylon."

Real benefits from "setting" are of a stabilizing nature, the speaker explained, such as insuring permanent removal of shrinkage from the fabric, a maximum degree of freedom from wrinkles and other distortions accompanying the use and laundering of the fabric. It was advised that "every manufacturer using nylon should study the setting of his product from two angles: what 'setting' will do to improve the efficiency of his manufacturing operations; what 'setting' can do to insure a more satisfactory finished product from a consumer standpoint."

Urging mutual understanding between weaver and finisher regarding the characteristics of nylon yarn as related to their processes, Mr. Atwood paid tribute to the constructive work of the weavers and finishers nylon technical committee, originally sponsored by the U. S. Army Air Corps and now fostered by the National Federation of Textiles.

By providing the necessary materials, the Army Quartermaster Corps has enabled the Navy Department to make a large procurement of field jackets, the War Department stated recently. The Navy Department recently adopted a jacket similar to the original Army general utility field jacket, designed by the Quartermaster Corps for the Army, except that the Navy jacket has a 100 per cent wool lining, while the Army jacket lining was made from a blend of 60 per cent half blood wool, 20 per cent cotton, and 20 per cent reworked wool.

BURK-SCHIER

WET PROCESSING AGENTS FOR EVERY TEXTILE APPLICATION



FOR HOSIERY AND UNDERWEAR

FOR YARNS AND PIECE GOODS



FOR WOOLENS AND WORSTEDS



BURK-SCHIER

Burk-Schier wet processing agents are manufactured under careful plant and laboratory control. Technical service men are always available.

BURKART-SCHIER CHEMICAL CO.

CHATTANOOGA, TENNESSEE MANUFACTURING CHEMISTS FOR THE TEXTILE INDUSTRY

PERSONALS

(Continued from Page 36)-

H. J. Hodnett, former chief paymaster for West Point (Ga.) Mfg. Co., has been named sales agent of West Point Utilization Co., succeeding Ralph Kirkpatrick, who resigned last month.

Capt. Robert E. Barnwell, Jr., on leave from Deering Milliken & Co., has been returned for duty in this country after completing 22 missions in the Pacific area with a Marine Corps bomber squadron. . . . Capt. Irving S. Geer, on leave from Southeastern Cottons, Inc., has been awarded the Bronze Star for meritorious service with an Army field artillery unit in the battle of Gaum. . R. S. Stribling, assistant in the research and development division of the Army's Philadelphia Quartermaster Depot, has been promoted to the rank of captain. . . . Roy G. Buck of the Navy's bureau of supplies and accounts, Washington, and D. W. Twigg of the Naval Clothing Depot at Brooklyn, N. Y., have been promoted to the rank of commander. . . . Lieut.-Comdr. Robert Leeson, in civil life president of Universal Winding Co. at Providence, R. I., was recently in the news as the result of heroic action with a PT squadron against the Japanese fleet off Leyte Island in the Philippines. His younger brother, Lieut. (j. g.) A. D. Leeson, is also in the same battle area and has been decorated. . Ely R. Callaway, Jr., cotton clothing contracting officer for the Philadelphia Quartermaster Depot, has been promoted to the rank of major. He is the son of the vicepresident and credit manager of Callaway Mills at LaGrange, Ga.

Frederick Wilkerson, recently discharged honorably from the Marine Corps, has resumed his former position as assistant to the superintendent of Montgomery (Ala.) Cotton Mills.

Mark Sharples has resigned from Heineman & Seidman of New York to take charge of textile analysis and laboratory work for Burlington Mills Corp.

Charles Boyd of Gaffney, S. C., has become superintendent of Eastern Mfg. Co. at Selma, N. C., succeeding T. B. Reynolds. Mr. Boyd was formerly an operating executive of mills at Spray and Lumberton, N. C.

Robert D. Williams, Jr., vice-president of Callaway Mills at LaGrange, has been appointed a lieutenant-colonel by Governor Ellis Arnall of Georgia, and made his aidede-camp.

Three more "dollar-a-year" men of the cotton and synthetic textiles division, textile, clothing and leather bureau of the War Production Board, have resigned so that they may resume pre-war activities. J. Bruce McCullough, chief of the cotton yarn branch, has been succeeded by Lewis S. Trundle of Washington. Kennedy C. Sparnon, assistant branch chief of the cotton fabrics branch, has returned to J. P. Stevens & Co., and Charles C. Moyer has resigned as chief of the sewing equipment section to accept a position with Willcox &

Gibbs Sewing Machine Mfg. Co. Assisting Mr. Trundle in the cotton yarn branch will be Henry C. Harper of Philadelphia, Pa., who will function as general branch consultant. Clifford S. Clark of Jenkintown, Pa., takes over Mr. Harper's former post as liaison consultant between the cotton varn branch of WPB, the Foreign Economic Administration and Treasury Procurement. Continuing as chief of the cotton varn section is Laurie C. Dickson of Charlotte. Boyce Choate goes to WPB from the Piedmont Mop Co. and Choate Mills, Inc., of Charlotte, as chief of the mop varn and twisted rope unit. Eugene Timanus of Anderson, S. C., has been designated chief of the combed yarn section, succeeding Fred S. Wentzell, who has been transferred to a consultant status. Walter F. Conley of Guilford, Conn., continues as chief of the narrow fabrics section, while S. Bruce Smoot of Arlington, Va., has been designated chief of the allocation section where he will deal with priorities related to cotton sale yarn, rubber thread and elastics. Other textile men remaining with the WPB are E. N. Brower, Curtis E. Browne and Adam Clement.

New Hyster "20" Lift Truck

The Hyster "20" lift truck, shown in the accompanying illustration, can go anywhere, get there in a short time and carry a load up to 2,000 pounds, says the Hyster Co. of Portland, Ore. Small, compact, gas-powered and equipped with pneumatic tires, the truck is said to fill a particular need in any kind of plant where materials must be transported, stacked, stored and loaded or unloaded. It has a trav-



eling speed of 12 miles per hour and standard controls. Further information is available from Dept. T. B. of the manufacturer, Portland 8, Ore.

Rapid Water Analysis

The "Aero-Titrater," shown in the accompanying illustration, is said by its manufacturer to furnish the industrial plant operator and laboratory technician a rapid, precise method for the determination of hardness, calcium



and magnesium content. The apparatus is described as very simple, with determinations possible within ten minutes and foolproof operation allowing identical results with different operators. The instrument is already calibrated and ready for assembly and use. There are no moving parts to wear out and no delicate features to get out of adjustment. All vital parts are of durable plastic construction. Additional information may be secured from Dept. T. B., Chief Chemical Corp., 55 West 42nd Street, New York 18, N. Y.

"Doc Mac's" Letter

Alfred R. Macormac, associate professor of textile chemistry at Alabama Polytechnical Institute, Auburn, now on leave to the Jeffersonville (Ind.) Quartermaster Depot, has recently been sending regular "home-front" reports to graduates of the Auburn textile school now in the armed services. The latest newsletter, mailed out in the early fall, contained items about the school, current activities in the textile industry and its post-war outlook, and news from Auburn textile graduates.

American Cotton Mfgrs. Assn. To Lose Services of W. M. McLaurine



W. M. McLaurine, left, secretary and treasurer of the American Cotton Manufacturers Association for the past 18 years, has asked to be retired from active duty with the organization April 30, 1945, or sooner if association officials find it expedient in placing his successor.

It is understood that three men are under consideration for the A. C. M. A. post when it is vacated. It is also rumored

that the association office may be moved from Charlotte to Atlanta; this, however, would necessitate a troublesome rechartering of the organization since it is now incorporated under the laws of North Carolina. The association will hold its annual convention in April of next year, and it thus may be assumed that directors will take some prior action in order that Mr. McLaurine's successor may assume the duties of secretary and treasurer during April or May.

Mr. "Mac," as he is familiarly known in the textile industry, will have been an official of the American Association 18 years come Jan. 1. Before that he was secretary of the Cotton Manufacturers Association of Georgia and a professor at Tennessee State Teachers College and Georgia School of Technology.

While secretary and treasurer of the American Cotton

Manufacturers Association Mr. McLaurine has become recognized as an authority on industrial relations because of his writings and through his many public speaking appearances. In Charlotte he has been president of the Community Chest, a ration board member and active Rotarian. His assistant, for many years has been Miss Leona Bell,

CIDEGA MACHINE SHOP, Inc. Knitting Looms are fast, versatile and profitable, combining the best features of the loom and knitting machine.

Slaughter Machinery Co. 501 LIBERTY LIFE BLDG. - CHARLOTTE, N. C.





Floor Squeegees and Rakes Replacement Rubbers Hand and Machine Scrub Brushes

Immediate Shipments

he DENISON MANUFACTURING CO

SODIUM SULPHIDE

Established



The Sodium Sulphide produced by our method is clean, and our Sodium Suphide STRIPS are of the right thickness to prevent dust losses, yet dissolve easily

BARIUM REDUCTION CORPORATION OFFICE AND WORKS: SOUTH CHARLESTON, W. VA.

Manufacturers of High Quality Sodium Sulphide for Over a Quarter of a Century

WENTWORTH

Double Duty



lravelers

Reg. U. S. Pat. Off

HICKS - AMERICAN - WILSON - U. S. STANDARD

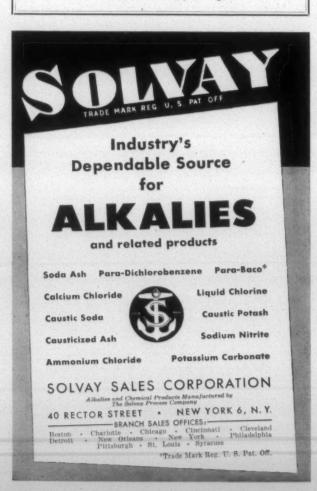
Last Longer, Make Stronger Yarn, Run Clear, preserve the SPINNING RING. The greatest improvement entering the spinning room since the advent of the HIGH SPEED SPINDLE

NATIONAL — ETARTNEP FINISH A NEW CHEMICAL TREATMENT

Manufactured only by the

NATIONAL RING TRAVELER CO.

PAWTUCKET, R. 1.
131 W. First St., Charlotte, N. C.
L. EVERETT TAYLOR, So. Agent



Testing Company Announces New Course

Each year the United States Testing Co., Inc., conducts, at its Heboken, N. J., laboratories, a three-week course in testing for the professors and heads of departments in the home economics divisions of leading colleges in the United States and Canada. Every year a large number of requests come from industrial and marketing firms who would like to have one or more of their employees receive the training of the course. The testing company has had to turn down these requests inasmuch as the demand from colleges and universities is so high that the course is filled up well in advance of the starting date.

Because of the large number of requests, the testing company has decided to initiate a comprehensive, condensed, three-week course for mill and industrial technicians that will be under the direction of the laboratory supervisor. This course will include instructions, demonstrations and lectures in all types of testing normally needed for the quality control of a product during the various manufacturing operations. The participants will have an opportunity to make tests themselves and thus become thoroughly familiar with the technique in operating testing machines. To be absolutely certain that individual attention will be given the members of the class, each group will be limited to 15 individuals. There will be both physical and chemical testing of all types fibers and fabrics.

The first three-week course will begin Jan. 8, 1945, with the class periods being from 9 a. m. to 4 p. m., five days a week. Additional information regarding the detailed setup and the cost of this course can be had by writing to the company's main office in Hoboken, N. J.

Highly Sensitive Pressure Gauges Released

New spring and bellows actuated pressure gauges that measure ranges between zero and five inches, and zero and 50 inches of water, are being made available for industry by the Brown Instrument Co., Philadelphia precision industrial instrument division of Minneapolis-Honeywell Regulator Co.

Two new types of gauges are being introduced, according to the Brown company announcement. One gauge has a single spring for pressure ranges. The other has a second spring, in tandem with the first, for vacuum and compound ranges. The new models are said to be possible for many applications. These include chemical manufacturing, processing and testing. Many improvements are outlined in the Brown announcement.

New Air Control for Washers

Rodney Hunt Machine Co. of Orange, Mass., has announced the development of a new type air control to regulate the pressure on the rolls of their stainless steel "Yankee Clipper" washers.

The new device provides a positive, air-operated control of the roll pressure. The company claims that with this unit, pressures as high as 20,000 pounds can be provided if desired.

"Yankee Clipper" washers are now available with all stainless steel construction and, according to Rodney Hunt, set new standards of performance and low cost production with improved air control equipment.

Cotton-Textile Institute Members Look Ahead To Post-War Years

(Continued from Page 16)—Foreign markets will have to be newly appraised. An analysis of the effect of war on foreign populations with respect to their wearing apparel, their household furnishings and their industrial practices will be necessary. New distributors will have to be found, new credit results appraised and terms of sale arrived at.

"At home our factory managers will be greatly concerned with the re-employment of returning veterans. This will be no simple responsibility. Their needs will require treatment of the highest possible intelligence and consideration. This will be a reconversion challenge to the industry of the first order.

The industry will be faced, too, with the problem of re-equipment. During four or five years of war the condition of obsolesence will have become extreme. Depreciation will have progressed in many cases beyond the measure indicated by income tax allowances. The need for new machinery with wise selection of such machinery will probably be greater than at any previous time in the industry's history. The machinery manufacturers in their turn will be under a great handicap because they, too, have their problem of reconversion from the tools of war to the tools of peace. They will be under intense pressure to make available a certain portion of their output to foreign countries on account of enemy destruction or because of great textile scarcity. Yet the total output of our machinery manufacturers for a period of at least two or three years after the war will probably be less than the needs of our own country.

'The maintenance of the present high production levels after the post-war period of rehabilitation is, of course, an open question. But the fears are greater than the hopes. These fears will impel renewed attention toward certain important technical developments. Our war experience has already demonstrated the advances which lie in more expert selection and breeding of cotton for particular uses. It has given great impetus to spinning tests which show that predetermined specification can be attained through the selection of specific varieties and mixtures which are on the side of greater economy. The Department of Agriculture, the cotton breeders and the farmers are paying attention as never before to the importance of adjusting breeding and growing programs to spinning needs as determined by careful research and testing. Fiber structure, fiber surface, fiber diameter, fiber length and all the physical characteristics are being studied in the testing and research laboratories as never before. The age-old problem of fiber slippage judged from the evidence of several laboratories is on the verge of solution. We are entering a period when the breaking strength of yarns may be greatly increased and when also the problem of stretch, which has always been a great handicap in cotton fabrics, will be mastered.

These developments which are occurring in cotton agriculture and in the very beginning of cotton processing, when added to the tremendous accomplishments in the field of yarn and fabric finishing provide great encouragement for those who have questioned the ability of cotton to compete with synthetic fibers. No one can doubt that the major factor in the future of cotton is the technological factor. The great research organizations which are now being nurtured by industry and by the government give assurance on that point."

The FABRIC OF WAR

The shuttle of war goes at a dizzy pace, and before the whole pattern is completed the people of many nations as well as their production ingenuity take their appointed places. Sometimes small things are responsible for important happenings. A typical instance is the part Rayon is playing in the present war.

This versatile fibre has made possible stronger tires, which have taken their places on all battle wheels from the Peep to the Super Fortress. It floats the deadly Fragmentation Bomb right in the lap of the enemy, as well as dropping food, ammunition and weapons to our beleaguered allies. Rayon is used to line American uniforms with the result that they look better... wear longer. Long extension lines which deliver "the Juice" at temporary front line airfields are possible because of rayon, as are numerous other necessities of war.

Practically all the Rayon which is being used by our armed forces is carried from the producer to manufacturer on Allen Company Rayon Warper Beams. While Rayon is versatile and strong, it is also tough on beams and requires a Warper beam that is stronger than any ever made before in order to deliver perfect packages. Since the advent of Rayon, Allen has consistently improved their product, until today it is the accepted and standard beam in the Rayon Field.



Classified Department

Southern Standard Mill Supply Co.

NEW, REBUILT and USED TEXTILE MACHINERY and SUPPLIES

512 W. Fourth Street Charlotte, N. C. Phone 3-8841

1064-90 Main St., Pawtucket, R. I.

N. Y. Office: 1022 Empire State Bldg.

C. E. LUTTRELL & COMPANY .

Textile Machinery and Supplies

GREENVILLE, SOUTH CAROLINA
"Textile Center of the South"

Wanted: Draper loom fixers and a tying in machine operator by Georgia mill.

Address "JK." Care Textile Bulletin

WE BUILD TEXTILE APRONS TROY WHITEHEAD MACHINERY BOX 1694 CHARLOTTE, N. C. PHONE 3-9831

I AM A MAN of 20 years' experience as Ovserveer of Carding and can furnish the best of references; now employed as an Overseer of Carding. Write "Box A-23," care Textile Bulletin. WANTED—Position as Overseer of Spinning by practical mill man; at present employed but wish to make a change. Write "No. 76," care Textile Bulletin.

WE AREAGENTS

For These Lines of Textile Specialties

"HERON" and SUPER-SU-PERIOR CHECK STRAPS
"G B C" SHEEPSKINS
NEUMANN CALESKINS
NOONE'S ROLLER, SLASH-ER, AND CLEARER CLOTHS
"G B C" SPECIAL ROLLER
CLOTHS

HOLT'S ROLLER GLUE
"G B C" BELT CEMENT
BILIRITE CANVAS LUG STRAPS
DAYTON "THOROBRED" LOOM
SUPPLIES

DAYTON V-BELTS AND PULLEYS

GREENVILLE BELTING

Manufacturers of Leather Belting Phone 2218 (Day) 3916 (Nite)

DETECTIVES

Purnished for undercover or open investigations to Industrial Plants, Attorneys, Banks and Individuals. Male and female operatives. Per diem basis only. "Our best advertisement is a job well done." References: Any Lynchburg bank or City official. Phone or write Cundiff's Detectives, Inc., Lynchburg, Va. No branch offices and no solicitors.

PAUL B. EATON Patent Attorney

1208 Johnston Bldg., Charlotte, N. C. 514 Munsey Bldg., Washington, D. C.

Former Member Examining Corps U. S. Patent Office

WANTED—Job as Second Hand or Head Loomfixer on Draper or C & K automatic looms in North Carolina; 25 years' experience in weave room work, coarse and fine yarns and silks. Good references from mill officials. Above draft age; small family. Contact me. "R-T," care Textile Bulletin.

WANTED—Job as Overseer of Brownell Twisting or Spinning, Experienced, Large family, Address "Brownell Twisting," care Textile Bulletin.

WANTED—Position as weave room overseer or second hand. Technical and practical experience on all cotton mill machines. Loom fixer on Draper E. X. XD. XK and L Model Looms. C. & K. 4x1, 4x4. Jacquard, Dobby. Knowles and cam head motions. Excellent knowledge of designing. Practical experience as loom fixer on wool, cotton, rayon and spun rayon. Write "A-J," care Textile Bulletin.

WANTED—Position as Overseer of Carding, first or second shift. Have had 21 years' experience as Second Hand and Overseer. Am I. C. S. graduate. Have small family. Now employed but for a good reason desire to make a change; can furnish A-1 references. Address "B. T. L.," care Textile Bulletin.

THERE ARE MANY ATTRACTIVE OPENINGS IN MILLS

In all sections of the United States and Canada. If you are seeking employment, write us fully regarding your experience and position desired; we will inform you of positions now open in your line of work.

CHARLES P. RAYMOND SERVICE, Inc. 284 WASHINGTON STREET BOSTON 8, MASS.

Over 45 years' confidential employment service for men seeking positions and employers seeking men.

39-YEAR-OLD SUCCESSFUL SALESMAN

39-YEAR-OLD SUCCESSFUL SALESMAN wishes to make desirable connection with a reputable company that needs a man familiar with every phase of grey goods manufacturing, and carding of synthetic blends. Have worked in every department of textile plant, and had successful selling experience for past eight years, also know textile costs and office management. Interested strictly in sales or sales management. An interview can be arranged if you want a high type man to handle southern sales or as sales representative. Pleasantly known to practically all southern textile executives.

Write 'V-24'."

Write "V-24," care Textile Bulletin.

WANTED

Cementer for public Roller Shop, man or woman. Must be fairly fast as well as good. Good pay for right person." Must have release and be ready to come on quick

20 to 40-40" Cotton Cards. Might possibly use 45". Give full information and

Write "Box 619," are Textile Bulletin

WANTED

Textile management engineer, experienced in maintenance control, plant layout, textile testing and routine, production control, waste handling and control, transportation. Traveling required. Good post-war oppor-

WANTED-Loom Fixer

Northeast Georgia mill wants an expert fixer for Jacquard, dobby and box work. Duties will also consist of training other loom fixers.

Write "Box C-9," care Textile Bulletin.

MANAGER AVAILABLE

Thoroughly experienced all phases cotton yarn mill from buying cotton to selling product. Also had years of experience on colored and novelty yarns. At present employed but have reason for considering changes

Write "Manager, care Textile Bulletin.

INDUSTRIAL ENGINEER

Now connected with large textile firm, desires change. Fifteen years of varied engineering experience embracing motion time analysis, timestudy, wage incentives, standard and budgeted costs. Age 34; married; college training.

Write "Box 312,"
care Textile Bulletin.

For cotton mill making colored yarn fabrics, suitings, coverts, tickings, denims, sale yarns. Must have knowledge of mill, office, fabric development, sales, and be capable of assuming many responsibilities. Location deep South.

Address "South," care Textile Bulletin.

OVERSEER OF SPINNING

For mill making suitings, coverts, tickings; also sale yarn for knitting trade. Good op-portunity. Permanent position.

Address "OS," care Textile Bulletin.

Index to Advertisers

Pa		
Akron Belting Co. Allen Co.	48	Kearny Mfg. Co.
Akron Belting Co.	43	Keever Starch Co
Arkansas Co.	10	Meerer Sourch Co
Armstrong Cork Co.	14	
Armstrong Cork Co.	A STATE OF	Lambeth Rope C
—B—		Lempco roducts.
Baily & Co. Joshua L.	52	Loper, Ralph E.
Barium Reduction Corp.	41	Luttrell & Co.,
Barkley Machine Works	59	
Burkart-Schier Chemical Co. 38 and	39	
Baily & Co., Joshua L. Barium Reduction Corp. Barkley Machine Works Burkart-Schier Chemical Co. 38 and		National Ring T
Carolina Refractories Co.	50	Neisler Mills
Carolina Refractories Co.	20	N. Y. & N. J. L
Clinton Co.	31	Norlander-Young
Commercial Factors Corp. Corn Products Refining Co. Crabb & Co., William	25	
Corn Products Renning Co.	63	Orkin Extermina
Crabb & Co., William	93	Orkin Extermina
Crompton & Knowles Loom Works Cundiff, John O. Curran & Barry	44	
Cundiff, John O.	69	Peach & Co., D.
Curran & Barry	04	Pease & Co., J.
—D—		Premier Roller 8
Dary Ring Traveler Co.	55	
Dayton Rubber Mfg Co.	17	
Dary Ring Traveler Co. Dayton Rubber Mfg Co. Denison Mfg. Co. Dronsfield Bros. Dunning & Boschert Press Co.	41	Raymond Service
Dronsfield Bros.	46	Rhoads & Son,
Dunning & Boschert Press Co.	59	Rice Dobby Chai
		Riviera Hotel
' —E—		
Eaton, Paul B.	99	Scott Co., Henry
Engineering Sales Co.	. 53	Seydel-Woolley
—F—		Slaughter Machi
Defeir Dessing Co	19	Solvay Sales Co
Foster Machine Co.	9	Sonoco Products
rooter macrime ov.		Southern Belting
—G—		Southern Stands
Gates Rubber Co. General Chemical Co.	4	Steel Heddle Mf
General Chemical Co.	. 23	Stein, Hall & C
Gluckin & Co., Wm. Gossett Machine Works	. 59	Stevens & Co.,
Gossett Machine Works	. 57	
Greensboro Loom Reed Co.	. 57	Terrell Machine
Greenville Beiting Co.		Textile Apron C
Gulf Refining Co.	. 5	Texwood Mfg. &
Habow Chemical Co.	50	Valentine & Co
Houghton & Co. E. F	7	
Houghton & Co., E. F. Houghton Wool Co.	37	Veeder-Root, In Victor Ring Tr
—I—		Vogel Co., Josep
Industrial Rayon Corp.	61	
Industrial Rayon Corp. Iselin-Jefferson Co.	. 52	WAK Industries
20 No. 프로젝트 : [12] 10 2 Miles (14) 12 No.		Wellington, Sea
Janking Matal Co	57	Whitehead Mac
Jenkins Metal Co. Johnson Chemical Co.	55	Whitin Machine
Jordan, Jr., W. H. & F.	46	Whitinsville Sp
Portuant, W. H. O. F.		THURSDAY COP

Pag	ge
-K-	59
	38
Acever Startin Co.	30
-L-	
Lambeth Rope Corp.	24
	29
Loper, Ralph E.	57
Luttrell & Co., C. E.	44
—N—	
National Ring Traveler Co.	42
Neisler Mills	52
N. Y. & N. J. Lubricant Co. Front Cov	er
Norlander-Young Machine Co.	
-0-	
Orkin Exterminating Co.	55
P	
Peach & Co., D. W.	35
Pease & Co., J. N.	
	50
Raymond Service, Inc., Chas. P.	44
Rhoads & Son, J. E.	
Rhoads & Son, J. E.	
	51
	37
-S-	
Scott Co., Henry L.	48
Scott Co., Henry L. Seydel-Woolley & Co.	37
Slaughter Machinery Co. 41 and	54
Solvay Sales Corp.	42
Sonoco Products	2
Southern Belting Co.	50
Southern Standard Mill Supply Co.	44
	13
Stein, Hall & Co.	35
	52
-T-	
Terrell Machine Co.	5
Textile Apron Co.	45
Texwood Mfg. & Sales Co.	5
Valentine & Co., J. W.	8
Valentine & Co., J. W. Veeder-Root, Inc. Back Co	TIM
Veeder-Root, Inc. Back Co Victor Ring Traveler Co.	5
Vogel Co., Joseph A.	55
-W-	
WAK Industries	
Wellington, Sears Co.	
Whitehead Machinery Co., Troy	4
Whitin Machine Works	- 9
Whitinsville Spinning Ring Co.	. 5

WANTED

Textile Cost Accountant preferably with manufacturing experience or equivalent. Position open with group of successful modern milis operating on grey and colored finished goods. Permanent position at good salary. Correspondence kept confidential and all replies will receive consideration if full details of present position, experience, age, etc are included.

Write " Box No. 68," care Textile Bulletin

ATTENTION GREY GOODS MILLS

Are you interested in obtaining a higher divisional factor and save brokerage com-missions on your cotton grey goods? Top manufacturer interested in entire or part output for current and post-war proposition to convert your grey goods into printed fabrics and bleached goods. Can also finance or purchase interest.

Write "Box 669," care. Textile Bulletin.

Experienced Overseer of Tube Twisting and Winding for a Western Mill.

Write "T. O. C.." care Textile Bulletin.

NOTICE TO ROLLER SHOPS

I can now fill your orders for KROME-WELD cot and apron cement in the origi-nal glass jars same as I used to put it in.

Send orders to H. C. SWANN 1206 Pine St., Kingsport, Tenn.

Second hand or Assistant Overseer of Weaving, Model E. Draper Looms, on 2, 3 and 4-harness work. If interested, write "Box C-81," care Textile Bulletin.

FOR SALE

Complete Weaving Unit, consisting of 27 C. & K. Heavy Duck Looms; widths ranging from 58" to 72"; 1 Beamer, 1 Brusher and Inspecting Machine, Motors, etc.

Write or wire E. T. Combs, 2271 San Jose Ave. Alameda, Calif.

DRONSFIELD'S PATENT ATLAS BRAND EMERY FILLET

THE PRINCIPAL MILL SUPPLY HOUSES

STOCKED BY



Processing Wartime Cotton Goods To Meet Military Requirements

(Continued from Page 28)—action for later finishing operations, such as sanforizing and waterproofing. For this, a formula made up of 20 pounds of penetrant and 25 pounds of finishing oil per 200-gallon mix, padded at 140-160° F., will give good results.

When dyed goods are finished dry the finishing formulas may be reduced 50 per cent with similar results as obtained on wet goods. The wet cloth is finished on a quetsch (padder mangle) placed in front of a range of dry cans. This is run through the mix, dried on the cans and framed to width on a tenter frame, preferably covered.

There are two other processing methods for handling vat colors on military fabrics which will be discussed in a subsequent article. There are the pad-pigment-jig method and the continuous reduction method. These conventional processing methods will be discussed with various adaptations used in preparation of cloth prior to dyeing, as well as the various hook-up combinations of standard dyeing equipment which may be used advantageously on different cotton constructions for the military. A brief summarization will point out the practical advantages in mercerizing of heavy goods from a color value angle. As there are many new ideas now being advanced relative to the processing of vat colors on heavy goods, some of the feasible and practical arrangements of the latest type units with older equipment in plant modernization will be stressed.

Sinclair Publishes Textile Lubrication Guide

A complete lubrication guide for cotton and woolen mills is contained in the third 1944 edition of *The Service Factor*, recently made available to the textile industry by Sinclair Refining Co. The textile flow chart and lubrication guide is the result of a well co-ordinated program of investigation, during which manufacturers of textile machinery were consulted and thousands of practical tests in mills carried out. Use of this information is said to enable textile mills to reduce the number of oils and greases required, minimize the possibility of errors, decrease inventory of lubricants, and simplify dispensing and storing problems. This issue may be secured by writing Sinclair Refining Co. at 573 West Peachtree Street, Atlanta, Ga.

New Rayon Output Record Forecast

United States production of rayon in 1944 will approximate 715,000,000 pounds, setting a new production record for the industry, it was stated recently by William C. Appleton, president, American Viscose Corp. This volume compares with an output of 663,000,000 pounds in 1943 and 633,000,000 pounds in 1942. The increase over last year's output is eight per cent.

The increase this year has been due chiefly to expanded production by order of the War Production Board of high-tenacity viscose rayon yarns for use in military and synthetic rubber tires and self-sealing gasoline tanks, and to slightly enlarged output of viscose rayon staple fiber urgently needed for civilian clothing requirements.

Of the total output, about 547,000,000 pounds will consist of continuous filament rayon yarn of the viscose, acetate and cuprammonium types. This compares with 501,000,000 pounds in 1943 and 479,000,000 pounds in 1942. The

balance of the production, 168,000,000 pounds, will be rayon staple fiber, the short fibers from which spun rayon yarns and fabrics are made. This year's output of rayon staple fiber will compare with a production of 162,000,000 pounds in 1943 and 153,000,000 pounds in 1942.

Booklet Describes Du Pont Continuous Peroxide Bleaching

Two continuous peroxide bleaching processes—among the more recent outstanding contributions to the textile industry—are described in a profusely illustrated 24-page, two-color booklet just released by the electrochemicals department of E. I. du Pont de Nemours & Co., Inc.

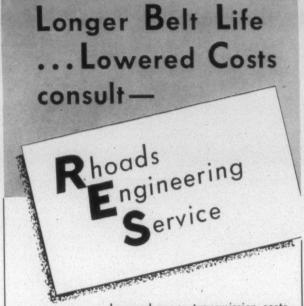
Prepared by the peroxygen products technical service staff with the co-operation of officials, engineers, chemists and operators of textile mills and equipment companies, the booklet details both pictorially and editorially the application of the two processes—the continuous "rope" system and the continuous "open width" system. The illustrations include installations already in operation, "three-dimensional" drawings of the steps in the processes, and diagrams showing power, steam and solution control systems.

Although the equipment and method used in the processes are new to the textile industry, information in the booklet is based on mill experience which has been gained by successfully bleaching hundreds of millions of yards of cloth in several leading American textile mills. The Du Pont continuous bleach system is essentially an arrangement of saturators, cloth heaters, J-boxes or other storage devices and washers. In both the open width and the rope continuous bleaching systems the cloth is prepared as usual, saturated with caustic soda, squeezed to eliminate the excess chemicals, heated to optimum operating temperature by passing through a new type Du Pont cloth heater, stored in an insulated stainless steel I-box for one hour, then pulled out and washed. The cloth is then saturated with an alkaline peroxide solution, passed through a second cloth heater, piled in a J-box for bleaching, washed and pulled to the white bin.

The new continuous bleaching processes are offered by Du Pont to textile mills as a contribution to the industry. The company sells no textile equipment but does manufacture peroxides for the continuous bleaching system—"Solozone" DFF dustless and free-flowing sodium peroxide, and "Albone" 100-volume electrolytic hydrogen peroxide.

The appointment of an industry advisory committee to aid the Office of Price Administration in problems that may arise in the pricing of wet corn milling products has been announced by that agency. This committee will represent ten companies.

Members of the group are: Arthur C. Mohr of Anheuser-Busch, Inc., at St. Louis, Mo.; J. H. Lind, Jr., of Penick & Ford, Ltd., at New York; Theodore Sander, Jr., of American Maize Products Co. at New York; Frank Greenwall of National Starch Products, Inc., at New York; R. E. Clizby of the Clinton Co. at Clinton, Iowa; A. E. Staley, Jr., of A. E. Staley Mfg. Co. at Decatur, Ill.; George W. Ross of the Huron Milling Co., Inc., at New York; Roy L. Kruger of the Hubinger Co. at Keokuk, Iowa; Earl B. Pulse of Union Starch & Refining Co. at Columbus, Ind.; and Fred Mueller of Corn Products Sales Co. at New York.



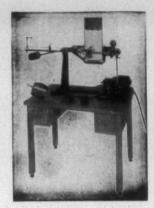
Lowered power transmission costs through the application of Tannate Leather Belting will be an important factor in keeping operating expenses down in the days ahead. Rhoads Engineering Service has shown a great many textile mills how to get longer belt life and greater drive efficiency with less maintenance time and trouble. We can help you too in planning a new drive or changing an old one.

Rhoads Tannate Leather belting is a long life belt with unusual strength (1/3 to 1/2 higher than

choice oak belting) and a firm
pulley grip that
maintains efficiency even under
varying loads. It
is resistant to
moisture, machine oils and
many weak
chemicals. Little
maintenance is
required to assure long life.







Exclusive Incline - plane Tester. Tests from single hair to 2,000 grams tensile.

Exclusive design-Exclusive advantages



* Registéred

Scott Testers incorporate numerous advantages of design and recording which make them simpler, surer and more con-venient to use. Our 60 models cover the needs of the textile industry for tensile, hysteresis, flexing, twist, burst, crepeage,

HENRY L. SCOTT CO. 115 Blackstone St. Providence, R. I.

REPRESENTATIVE JOHN KLINCK 304 FOREST AVENUE AUGUSTA, GEORGIA

Standard of the World

Any way you look at it "AKRON" is good belting



"AKRON" LEATHER BELTS

"CASCADE"

"SPIN TWIST"

for Looms

for Spinners and Twisters

Less slip - Not affected by machinery oil - More picks per minute - Lower cost per bolt or skien

THE AKRON BELTING CO.

AKRON, OHIO

Leather Belting Makers Since 1885 - Suppliers to the Textile Industry for 59 Years

SOUTHERN REPRESENTATIVES:

RALPH GOSSETT & WM. J. MOORE 15 Augusta Street, Greenville, S. C.

The AKRON BELTING COMPANY 406 S. 2nd St., Memphis, Tenn.

New Maid of Cotton To Be Chosen

Plans for the seventh annual Maid of Cotton contest have been announced by the National Cotton Council, sponsors of the event along with the Memphis Cotton Carnival Association and the cotton exchanges of Memphis, New Orleans and New York. The winner will be chosen Feb. 6, in Memphis, and shortly thereafter will begin a 90-day tour of the major cities of America. All candidates must submit completed application blanks and photographs to the council on or before Jan. 20, and a selected group of finalists to appear before the judges will be chosen from among the hundreds of entries expected.

As in past year, the contest is open to all girls between the ages of 18 and 25, inclusive, who are natives of one of the 17 cotton-producing states. Judging will be based upon personality, appearance and background, with special consideration being given for any singing, dancing or dramatic ability. Application blanks may be obtained by writing the council, Post Office Box 18, Memphis 1, Tenn.

During her tour, the 1945 Maid of Cotton will participate in local war bond campaigns, visit military establishments, extend greetings of the cotton industry to public officials, and be featured in showings in department stores emphasizing the proper care and conservation of cotton fabrics. Linwood Gisclard, the 1944 Maid of Cotton, achieved a record of war bond sales during her tour which was unequaled by any other non-professional performer. As a result, she won an official citation from the Treasury Department. A committee of judges to select the contest winner will be named soon.

Safety Council's Textile Officials Listed

Officials recently elected for the textile section executive committee of the National Safety Council include David Z. Walley of Rossville, Ga., vice-chairman; E. G. Padgett of Raleigh, N. C., secretary and news letter editor; H. E. Williams of Spray, N. C., engineering and safe practices pamphlet committee chairman; D. A. Purcell of Draper, N. C., health committee chairman; W. H. Taylor of Huntsville, Ala., membership and publicity committee chairman; E. A. Roberts of Atlanta, Ga., program committee chairman; F. H. Shuford of Raleigh, N. C., committee on cooperation with trade associations chairman; S. F. Kimball of Charlotte, visual education committee chairman, and G. D. McCeney of Charlotte, off-the-job committee chairman. Members-at-large include Frances Bethune of Gastonia, N. C., H. R. Cory of Swannanoa, N. C., W. B. Weaver of Spray and T. A. Wilson of Raleigh.

Pine Oil Allocation Order Revised

The War Production Board announced Nov. 27 that, in order to simplify inventory control, allocation order M-365, governing pine oil, has been revoked and its provisions transferred to a new schedule in the over-all chemicals allocation order M-300. Pine oil is used in the production of textiles, disinfectants, insecticides, soap, paint, synthetic resins and industrial cleaners for machinery.

Schedule 73 of order M-300 provides for certified statements of proposed use of pine oil. A customer's orders accompanied by such certifications should be in the hands of his suppliers not later than the 15th of the month preceding the month in which delivery is to be made.

Post-War Problems of the Cotton Textile Manufacturer

(Continued from Page 11)—in 1928 Fall River, Mass., had 3,637,000 spindles and today it has only 637,000 spindles. On this point the Monthly Review above quoted makes this observation:

"Apparently, the industry is following its old historical pattern of seeking low-cost areas in which to settle-areas providing low cost of fiber and low cost of labor. Moreover, as new mills spring up in Brazil, in Russia, in India and in Italy, these mills will be equipped with the most modern machinery while American mills will be laboring under a burden of excess equipment that is in varying degrees of obsolescence. The United States seems to be falling into the same position with relation to foreign countries that New England occupied with respect to the South when the trek of the cotton industry to the South was beginning to get under way. Even if the mechanical equipment of American mills were equal in efficiency to that of the more modern mills in foreign countries, cheaper fiber and cheaper labor would still give them a competitive advantage in world markets."

This movement of textile mills is acute even at the present moment. The American textile manufacturer is limited, due to war conditions, in his supply of new machinery, but it is reported that new machinery is being shipped out of this country at a time when American mills are in need of this equipment. It is reported that modernized mill equipment with 300 looms for the manufacture of denims has been established in a South American country with new machinery shipped out of this country. Such a movement in the textile industry must be watched with caution.

After the war many mills will be confronted with the problems of contract termination. After long study and discussion the necessary legislation has been passed to enable the government to make speedy and scientific disposition of terminated contracts. Recently conferences were held in textile centers through the South for the purpose of explaining to the industry the details of terminating contracts. Data on this subject will be available from time to time as experience is gathered. The reconversion process, however, involves much more than contract termination. It means that the individual manufacturer will be called upon to establish new production schedules to meet the needs of a peacetime market.

The problem of the returning veteran is one that cannot be passed over lightly. There will be technical difficulties of restoring men to their old jobs and of finding employment for those whom they displace. Some of these returning veterans will be more matured, more highly trained, more competent mentally. Others will return from military positions of prestige and compensation greater than that available in the mill. All of these conditions will require a treatment of the highest possible intelligence and consideration. A careful study should be made now so that each veteran upon his return may have proper orientation and proper training for the tremendous adjustment that must be made.

The post-war days will require much of us. We will be dealing with these three—machines, materials and men—but the greatest of these is men. These we must blend into a profitable productive organization with a minimum of wear on machinery—waste of material—and weariness of men.

A Change IN THE PICTURE

1941





Too Little - Too Late

1944



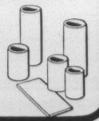


Too Much - Too Soon ...for the Axis!

In furnishing our forces with more and better of all they need to keep the Axis on the run, American industry has done the greatest production job in the history of war and nations. Kentex Aprons are but a tiny cog in the production machine, but their dependable and accurate performance has contributed to the increased production of vitally needed textiles.

In spite of shortages of material, we have continued to supply our trade with aprons, and genuine leather aprons, too.

Write us for samples and prices on Kentex Precision-Built Aprons.





TEXTILE APRON

EAST POINT, GEORGIA

J. B. KENNINGTON, OWNER

Premier

LONG DRAFT APRONS

Quality

Modern Machinery-Skilled Workmen Backed by 30 Years Experience Guarantees You a Perfect Apron

COMBED ROLLER SPECIALISTS

ASK FOR SAMPLES AND PRICES

PREMIER ROLLER SHOP, Hillsboro, N. C.



HABOW CHEMICAL CO.

MANUFACTURERS OF
Sanitary and Textile Chemicals



CONOVER, N. C.

PHONE 458

PROMPT REPLACEMENT SERVICE

Rockwood-Southern Short Center Drives Fiber and Metal Pulleys Bushings and Accessories Leather Belting V-Belts and Sheaves Veelos Adjustable V-Belts Weetlaghouse

• Southern Belting offers you prompt "One-Stop" Service on a complete line of mechanical drive equipment, that will save you time and money. You can fill all your drive needs quickly at

SOUTHERN Belting Company

Recent WPB Actions and Statements Reflect Textile Situation

To clarify current policy and to re-emphasize the urgency of war production and the fact that reconversion must not interfere with output for the military, a joint message has been issued by the War Production Board, the War Manpower Commission, the Army and Navy to their various field representatives. The document is essentially a reminder of the original policy underlying Priorities Regulation 25, emphasizing that war production must come first and that no authorization to produce less essential goods under PR-25 can be granted if it interferes with war output.

Production of cotton duck, below military needs throughout the current year, is expected to be brought up to requirements in 1945, according to estimates made by WPB. Among methods now being used to clear up the shortage are: hiring of additional workers for third shifts; replacing third-shift set-ups with two ten-hour work periods; improvement in housing and transportation in mill villages; increasing use of rayon in tire construction to retain cotton yarns for duck weaving; further conversion of looms; improved tent construction; and increased protection of duck in transit to battle areas. The Army has arranged high-priority shipment of cotton to France and Belgium so that textile mills there may produce an expected six million yards of duck monthly.

The compliance division of the War Production Board this month called attention to one of the most severe punishments ever imposed for black-market operations involving violation of WPB regulations. Two former officials of Industrial Laboratories, Inc., Passaic and Nutley, N. J., manufacturer of waterproof fabrics, have been sentenced to a year and a day in a Federal prison in addition to fines of \$5,000 each. The men, Robert W. Carter, president, and Solomon A. Van Gelder, secretary-treasurer, were accused of having obtained almost \$167,000 worth of rayon, critical chemicals and machinery purportedly "for U. S. Army, Navy and Lend-Lease requirements." Instead, states WPB, they caused the material to find an outlet in the New York civilian market as baby pants, shower caps and rain capes.

The hard fiber situation is looking better, according to interpretations of recent WPB actions. A recommendation that the private importation of burlap from India be authorized as soon as conditions warrant was made last month by the burlap importing and bag manufacturing industry advisory committee. Whether this idea will be effected depends mainly on crop conditions and availability of shipping space. Every effort will be made to increase the production of rope during the first quarter of 1945 in order to help meet the greatly expanded requirements of the military claimant agencies, War Production Board officials have informed the cordage industry advisory committee. Stated military requirements for the first three months of 1945 are "several millions of pounds" in excess of current production, WPB officials said.

Since the world supply of manila and sisal is very short because the war has cut off imports from the Far East, quotas cannot be increased for these fibers, WPB explained. Officials added that such fibers as jute and istle are in greater supply and thus are available to American mills. To increase rope manufacture for delivery to the military during the next quarter, WPB is considering the possibility of making a limited quantity of henequen fiber available to the hard fiber rope mills for the first time.

More Price Increases Expected To Result From Bankhead Amendment

The Bankhead Amendment is still a force in cotton textile pricing and more price increases are expected, according to the Research Institute of America in a report issued recently. The interim increases already granted, as well as new increases already on the way, will, however, be figured by a new formula. The price revision formula now to be applied is based on the 1936-1939 over-all profits for the industry with allowances for capital investments since that time. That formula will be applied to each major item, and ceiling price adjustments will be made on that basis. Many of the revisions will lower present ceilings appreciably. OPA hopes to complete the whole revision job this year.

2

When it granted the interim increases, OPA used a tentative formula which continued base period profit margins on each major item. Total mill profits, nevertheless, are substantially above the base period level because of the increased volume of business. In OPA's view, this higher level of profits permits price reduction. The proposed new formula looks to many mills like profit rather than price control. Indications are, the institute points out, that the validity of the proposal will be challenged in court.

A broad revision of price controls covering the sale of cotton and rayon finished piece goods was announced Nov. 24 by Price Administrator Chester Bowles. The revision is expected to have three major results, Mr. Bowles said: (1) to remove the defects of the present regulation, which, in a large measure, have been responsible for the use of higher cost finishes on piece goods; (2) to distribute more evenly the reduction of converters' margins on finished cotton goods resulting from increased cost of cotton gray goods recently required by the Bankhead Amendment; (3) to reduce prices of finished rayon goods by reducing converters' margins on these goods.

Producers' ceiling prices have been increased 9.18 per cent for terry cloth products, huck and crash towels, and corded napkins to bring them into conformity with Bankhead Amendment standards. In another action, also effective Dec. 4, the Office of Price Administration has revoked the adjustable pricing provisions for these items. The towel price increase is the first textile price revision to be made on the basis of complete cost data.

Cotton blankets have been deemed by OPA as not a "major cotton goods item" under Bankhead Amendment standards and their ceiling prices will not be increased. However, cotton blankets are being placed under adjustable pricing. It is expected that final price adjustments on duck and cotton flannel will be made by the price agency in the near future, completing OPA action in this field except for issuance of final price adjustments on denims, chambrays, sheetings and other "major items" given interim prices.

Fred N. Hall Heads New Firm

Plans for the establishment of Hall & Co., wholesale firm, in Spartanburg, S. C., have been announced. Fred N. Hall is president of the company which will distribute hardware, mill supplies, paint, plumbing and electrical supplies.



"Here's my guide to Ring Quality"



When you pin your faith in DIAMOND FINISH rings, your selection is justified by a reputation for Quality nearly 75 years old. Their extra fine polish permits high-speed starting. Their built-in evenness and durability yield dividends of economy and satisfaction through long years of trouble-free operation.

ITINSVILLE (MASS.)

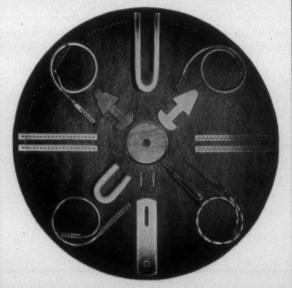
Makers of Spinning and FINISH Twister Rings since 1873



SPINNING DIAMOND RING CO.

RICE DOBBY CHAIN CO.

MILLBURY, MASS., U.S.A.



Southern Representatives

John P. Batson, P. O. Box 1055, Greenville, S. C. R. E. L. Holt, Jr., P. O. Box 1474, Greensboro, N. C.

(Ready to Serve You)

SELLING AGENTS FOR SOUTHERN COTTON GOODS

CURRAN & BARRY

320 BROADWAY NEW YORK, N. Y.

WELLINGTON SEARS CO.

65 WORTH STREET

NEW YORK

Representing 18 mills-merchandising 25,000 fabrics

Industrial Fabrics—Garment Fabrics Towels and Toweling—Drapery and Upholstery
Fine Cottons—Rayon

BRANCHES

Átlanta Boston Philadelphia

St. Louis Chicago

Detroit New Orleans San Francisco Los Angeles

Merchandising

Domestic

Export

JOSUA L. BAILY & CO.

40 WORTH STREET

NEW YORK

NEISLER MILLS COMPANY. Inc.

Selling Agents

66-68 WORTH STREET, NEW YORK

BOSTON CHICAGO LOS ANGELES SAN FRANCISCO

ISELIN-JEFFERSON

COMPANY

90 WORTH ST. NEW YORK 1, N. Y.

Selling Agents

Cottons + Rayons + Hosiery + also Yarns

Cotton Goods Market

Attention in the market continues to be centered on government contracts, directives and highly-rated critical needs. Pressure for supplies of all kinds is constantly being applied by both rated and unrated buyers, but mills are still hesitant to book further orders until their positions on first quarter supplies are clarified.

December production is already largely allocated, it is said, and while most mills are holding back on committing first quarter production, an extremely high per cent is declared to be earmarked for the military and other highly essential purposes. These demands are being enlarged constantly, and the frequency of directives during recent days is viewed as foreboding almost complete control of distribution by the government in the early months of

Influencing this caution on forward selling is also the price muddle, which is further accentuated by the fissure cracked open in the Little Steel wage formula. Ceilings on a number of cotton fabrics are claimed to be already below production costs, and this new situation imposes a problem, mills say, which calls for prompt action of OPA if any incentive is to remain for mills to go along wholeheartedly with the government on future production.

Direction One to Conservation Order M-91, which impounded cotton duck in excess of 500 yards in the hands of users, has been revoked by the textile, clothing and leather bureau of the War Production Board. The impounding action was one of many steps taken in the early part of September to help meet military requirements for tentage fabrics.

Since the armed services have negotiated to purchase such types of the impounded duck as they are interested in, the direction has been revoked so that stocks remaining in the hands of users may revert to normal permitted uses through their regular trade channels, officials of WPB's cotton fabrics branch said. Types of duck impounded under the direction were Army duck, numbered duck, flat duck and shelter tent duck.

Some improvement in manpower and reduction in absenteeism is hoped for in the first quarter, but mills are not too optimistic over the prospect. This is normally prompted in the South by the return of workers to mills after the farming and cotton picking seasons are over, it was stated. However, with shortages still existing in certain war industries in the South, which offer higher wages, no such normal influx of workers is held likely in the coming cold months.

> J. P. STEVENS & CO., Inc. fabrics for diversified uses

44 LEONARD STREET

EMPIRE STATE BUILDING

NEW YORK

Cotton Yarns Market

Combed yarn production in Southern mills last month shows a slight increase over September and about the same level as in October. If this trend is maintained in December, the fourth quarter will be about 15 per cent under the third quarter and 24 per cent under the corresponding 1943 quarter, analysts find. Though there has been an increase, it still does not mean any more yarn can be sold civilians because Government demands for single and two-ply have risen.

The Census Bureau has reported that the cotton spinning industry operated during October at 117.4 per cent of capacity, compared with 122.3 per cent in September this year and 129.5 per cent for October, 1943.

Spinning spindles in place Oct. 31 totaled 23,138,762, of which 22,228,138 were active at some time during the month, compared with 22,279,574 active during September this year and 22,599,574 during October last year.

Active spindle hours during October totaled 9,486,971,017 or an average of 410 hours per spindle in place, compared with 9,380,598,254 and 404 in September this year and 10,069,362,601 and 432 in October last year.

Spinning spindles in place Oct. 31 included: in cotton-growing states, 17,618,872, of which 17,308,422 were active; and in the New England states, 4,924,700, of which 4,380,232 were active.

Active spindle hours for October included: in cotton-growing states, 7,947,740,072, or an average of 451 hours per spindle in place; and in the New England states, 1,378,036,966 and 280.

Cotton consumed during October totaled 795,379 bales of lint compared with 793,096 in September and 846,993 in October last year. Last October's figures included: in cotton-growing states, 701,609 bales, compared with 703,-152 during September this year, and 740,655 during October last year; and in the New England states, 74,429 bales, compared with 71,788 and 83,310.

Every day is finding it harder to get cotton yarns for purely civilian needs, with not even optimists looking for any let-up in the situation for at least six months ahead.

Increased military needs continue to gobble up the entire list of yarns as fast as they are spun, with rated orders booked far ahead. A slight increase in production, while cheering news in the market, has been matched with larger government orders.

J. W. Valentine & Co., Inc.

Selling Agents

40 Worth St.

New York City

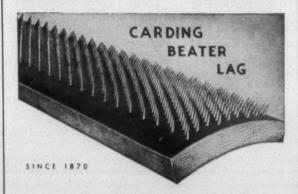
Southern Representative
T. HOLT HAYWOOD

612 S. Main St.

Winston-Salem, N. C.



PINS and LAGS



A BIG MODERN PLANT PLUS 73 YEARS of EXPERIENCE

It means that you can speed your production for the war effort by making use of all the knowledge we have gained on needle-pointed specialties for the preparation of wool and other fibres. In all the field—no plant like this—no such rich fund of experience—no such quality. Your inquiries will receive emergency attention.

WILLIAM CRABB & CO. 303-3rd Ave. Newark N. J.

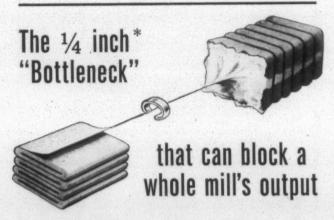
The best fabricators of S. BLICKMAN, Incorporated stainless steel and special equipment in the country. Send us your specifications.

Slaughter Machinery Co. 501 LIBERTY LIFE BLDG. - CHARLOTTE, N. C.

J. N. PEASE & COMPANY

Engineers - Architects

JOHNSTON BUILDING CHARLOTTE, N. C.



YOUR SUCCESS in processing bales of fiber into bolts of cloth as fast as expected today can be stymied by a very little thing ... the wrong traveler.

BOTTLENECK or PRODUCTION-BOOSTER? The traveler can be either. Assuming your equipment is in proper condition, if the traveler is WRONG, the flow of work through the mill will be slowed up at the spinning or twisting. Production will lag, quality will suffer, and help will drift away. If the traveler is right, you can meet output schedules, cut down waste, and hold the help you need so badly.

THERE'S A MAN WHO KNOWS plenty about choosing travelers...the Victor Service Engineer. You'll find his information up-to-the-minute, even on the new fibers, and the Victor Traveler he recommends RIGHT. A word from you will bring him promptly. Write, wire, or call.

*or whatever your travelers measure.



Labor Department Report Reflects Continued **Employment Decline**

Total wage-earner employment in cotton goods manufacturing continued to decline in 53 of the 66 principal cotton goods areas between April and July, 1944, Secretary of Labor Frances Perkins has reported, on the basis of a supplement to the study on employment, hours and earnings, and turnover rates in 66 cotton goods areas released by the Bureau of Labor Statistics. Since January, there has been a net loss of more than 25,000 workers, bringing employment in July down to 434,200—the lowest employment level since the fourth quarter of 1940.

The serious nature of the manpower problem in the industry, according to the report, is indicated by the accumulated war demands for more cotton goods, and the increasing difficulty in finding, at retail levels, many items of essential civilian apparel. Moreover, those cotton constructions most urgently needed-duck, tire cord, denims, print cloths, etc.-are produced in the South, where a large part of the labor losses occurring since January, 1944, were ex-

Nationally, total separation rates in the industry continued to fluctuate at high levels. In contrast to the monthly rate for discharges and lay-offs, which averaged less than one worker per 100 employed, the quit rate for the period August, 1943, to July, 1944, indicated that mills had lost, because of quits alone, the equivalent of 78 per cent of their total employment during the 12-month period.

The loss of 11,000 wage earners from April to July was almost evenly divided between the North and the South, but the drop was 9.1 per cent of the total employment in the North as against 1.6 per cent in the South. While separation rates are higher in the South than in the North, Southern mills have to this point been able to recruit labor, even though such new employees are most often without previous experience. Decreases were reported by 36 of the 48 Southern areas and all but one of the 18 Northern areas; in one Southern and four Northern areas the decreases amounted to ten per cent or more in contrast to the loss of 2.5 per cent for the entire industry during the period. One Northern area and 12 Southern areas showed increases between April and July.

The high rate of absenteeism, however, among Southern cotton mill workers continues to be a major problem. Absenteeism is notably less prevalent in the North, although mills there employ larger percentages of women workers. The major problem among Northern mills is the continued loss of manpower to other industries. While turnover rates indicate that total separations per 100 employees in Northern mills are small—in some cases less than half the current separation rates in the Southern mills—the possibility of replacing such losses, as judged by the accession rates, is quite small, so that a deficit nearly always results.

Average weekly hours increased from 41.3 to 42.4 in the period April to July, 1944. This increase in hours offset the loss of 11,100 in employment so that total man-hours remained almost identical. In the South, where hours for the same period increased from 40.9 to 42.2, there was an increase of 196,000 weekly man-hours among reporting mills despite the loss of 5,000 workers. However, nine of the Southern areas reported decreases in average weekly hours between April and July. In the North, mills reported 43.7 hours per week for July showing only 0.6 of an hour increase from April, the lowest month in 1944. The decrease of 200,000 weekly man-hours during the period indicates that the fractional gain in average weekly hours was not sufficient to offset the loss in employment. When due account is taken for absenteeism, breakdowns and unpredictable interruptions, average weekly hours in the North indicate work schedules of 48 or more hours per week, and it is unlikely that hours will increase much beyond this point.

Textile Microscopy Explained To A.A.T.T.

Dr. George L. Royer of American Cyanamid Co., Calco Chemical Division, delivered an address on "Textile Microscopy—Application to the Control of Quality in Dyeing and Finishing" at the December meeting of the American Association of Textile Technologists. A number of dyed textile fibers were shown in cross-section, and the use of the cross-section technique demonstrated in the study of the dyeing process and also from the viewpoint of identifying the various fibers in a textile material. The use of microscopical techniques in the examination of certain defects in textile dyeing were also demonstrated.

Textile Fiber Test Is Described

Educators and industrialists representing the United States, Canada, England and Australia heard of a new method of testing textile fibers when they convened at the eight-day conference at North Carolina State College, Raleigh, recently. The new method, as described by A. C. Walker, engineer of the Bell Telephone Laboratories, makes it possible to analyze large quantities of textile materials and to apply statistical control methods to them to improve efficiency in production. Quality control by statistical techniques will be "extremely helpful" in future industrial relations, Mr. Walker stated.

Firm To Specialize in Electronics

Southern Electronics, Inc., the only firm in the Southeastern area of the United States specializing in the sale and installation of industrial and commercial electronic equipment, has established offices in Greensboro, N. C. Officers of the company are Loren B. Harrell of Jacksonville, Fla., president; S. E. Atcheson of St. Augustine, Fla., secretary-treasurer, and Thomas N. Adams, now serving with the Signal Corps of the U. S. Army.

South Central A.A.T.C.C. To Hear Berwick

John R. Berwick of Sandoz Chemical Works will be the guest speaker and will discuss "Metachrome Dyeing of Wool" when the quarterly dinner session of the South Central section of the American Association of Textile Chemists and Colorists is held at Hotel Patten, Chattanooga, Tenn., Dec. 9.

A.S.T.M. Meetings Are Announced

A schedule of meetings for the American Society for Testing Materials has been announced as follows: 1945 spring meeting, Hotel William Penn, Pittsburgh, Pa., Feb. 28; committee week, Hotel William Penn, Pittsburgh, Feb. 26 to March 2; annual meeting, Hotel Statler, Buffalo, N. Y., June 18-22.







SOUTHERN SOURCES OF SUPPLY

FOR EQUIPMENT, PARTS, MATERIAL, SERVICE

Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in TEXTILE BULLETIN. We realize that operating executives are frequently in urgent need of information, service, equipment, parts and materials, and believe this guide will prove of real value to our subscribers.

ABINGTON TEXTILE MACHINERY WORKS, Abingdon, Mass. Offices at Boston, Mass., and Charlotte, N. C.

ACME MACHINE & TOOL CO., 2516 Wilkinson Blvd., Charlotte, N. C.

ACME STEEL CO., 2838 Archer Ave., Chicago, Ill. Sou. Office and Warehouse, 603 Stewart Ave., S.W., Atlanta, Ga., F. H. Webb, Dist. Mgr. Sou. Sales Reps.: C. A. Carrell, 523 Clairmont Ave., Decatur, Ga., Phone Dearborn 6267; Marcus M. Brown, 1231 Lexington Ave. (Phone 8583), Charlotte, N. C.; William G. Polley, 937 Cherokee Lane, Signal Mountain, Tenn., Phone Chattanooga 8-2635; John C. Brill, 309 Magazine St., New Orleans, La., Phone Magnolia 5859. Warehouses at Atlanta, Ga., Greenville, S. C., New Orleans, La.

AKRON BELTING CO., THE, Akron, O., Sou. Reps.: Ralph Gossett and Wm. J. Moore, 15 Augusta St., Greenville, S. C.; The Akron Belting Co., 406 S. 2nd St., Memphis, Tenn.

ALLEN CO., 440 River Road, New Bedford, Mass. Sou. Repr.: L. E. Wooten, Fort Mill, S. C.

AMERICAN BLOWER CORP., P. O. Box 58, Roosevelt Park Annex, Detroit, Mich.; 7 N. 6th St., Richmond, Va.; 1211 Commercial Bank Bldg., Charlotte, N. C.; Room 714, 101 Marietta St. Bldg., Atlanta, Ga.; Room 309, Jahncke Bldg., 816 Howard Av., New Orleans, La.; 619 Texas Bank Bldg., Dallas, Tex.; 312 Keller Bldg., Houston, Tex.

AMERICAN CYANAMID & CHEMICAL CORP., 30 Rockefeller Plaza, New York City, Sou. Office and Warehouse, Wilkinson Blvd., Charlotte, N. C., Hugh Puckett, Sou. Sales Mgr. Reps.: John D. Hunter, E. H. Driver, Paul F. Haddock, Charlotte Office; E. J. Adams, 1404 S. 22nd St., Birmingham, Ala.; Jack B. Button, 510 N. Mendenhall St., Greensboro, N. C.; C. B. Suttle, Jr., 423 Clairmont Ave., Decatur, Ga.; K. E. Youngchild, 10 South St., Mobile, Ala.

AMERICAN MOISTENING CO., Providence, R. I. Sou. Plants, Charlotte, N. C. and Atlanta Go.

AMERICAN VISCOSE CO., 350 Fifth Ave., New York City. Sou. Office, Johnston Bldg., Charlotte, N. C., Harry L. Dalton, Mgr.

ARKANSAS CO., INC., P. O. Box 210, Newark, N. J. Sou. Repr.: Jasper M. Brown, 1204 Greenwood Cliff, Charlotte, N. C.

ARMSTRONG CORK CO., Industrial Div., Textile Products Section, Lancaster, Pa. Sou. Office, 33 Norwood Place, Greenville, S. C. J. V. Ashley, Sou. Dist. Mar.

ARNOLD, HOFFMAN & CO., INC., Providence, R. I. Sou. Headquarters, 2130 N. Tryon St., Charlotte, N. C., Mgr., Walter T. Bunce, Phone 2-4073; Technical Service Men: Reid Tull, 116 W. Thomas St., Salisbury, N. C., Phone 1497-J; Philip L. Lavole, 2130 N. Tryon St., Charlotte, N. C.; John H. Graham, P. O. Box 904, Greenville, S. C., Phone 2922; John R. Brown, P. O. Box 749, Trussville, Ala., Phone 127; Warehouse, 2130 N. Tryon St., Charlotte, N. C.

ASHWORTH BROS., INC., Charlotte, N. C. Sou. Offices, 44-A Norwood Place, Greenville, S C.; 215 Central Ave., S.W., Atlanta, Ga.; Texas Rep.: Textile Supply Co., Dallas, Tex.

ATWOOD MACHINE CO., Stonington, Conn. Sou. Rep.: Fred Sails. Johnston Bldg., Charlotte, N. C.

AUFFMORDT & CO., C. A., 468 Fourth Ave., New York City.

BAHNSON CO., THE, 1001 S. Marshall St., Winston-Salem, N. C.; 886 Drewery St., Atlanta, Ga.

BANCROFT BELTING CO., Boston, Mass. Warehouse and Sou. Distributor, Carolina Supply Co., Greenville, S. C.

BARBER-COLMAN CO., Rockford, Ill. Sou. Office, 31 W. McBee Ave., Greenville, S. C., J. H. Spencer, Mgr.

BARIUM REDUCTION CORP., S. Charleston, W. Va. Sou. Distributors: American Cyanamid & Chemical Corp.; F. H. Ross & Co., Charlotte, N. C.

BARKLEY MACHINE WORKS, Gastonia, N. C.

BARNES TEXTILE ASSOCIATES, INC., 10 High St., Boston, Mass. Sou. Office, 318 Montgomery Bldg., Spartanburg, S. C.

BECCO SALES CORP., Buffalo, N. Y. Sou. Reps.; J. D. Quern and D. S. Quern, 1930 Harris Road, Charlotte, N. C.

BEST & CO., INC., EDWARD H., Boston, Mass. Sou. Rep.: W. C. Hames, 185 Pinecrest Ave., Decatur, Ga., Phone Dearborn 5974; Ralph Gossett, William J. Moore, 18 Augusta St., Greenville, S. C., Phone 180.

BOND CO., CHAS., 617 Arch -St., Philadelphia, Pa. Sou. Rep.: Harold C. Smith, Greenville, S. C.

BORNE, SCRYMSER CO., Works and Offices, 632 S. Front St., Elizabeth, N. J.; Warchouse, 815 W. Morehead St., Charlotte, N. C. Sou. Mgr., H. L. Siever, Charlotte, N. C., Reps.: W. B. Uhler, Spartanburg, S. C.; R. C. Young, Charlotte, N. C.; John Ferguson, LaGrange, Ga.

BROWN CO., THE DAVID, Lawrence, Mass. Sou. Reps.: Greenville, S. C., Raiph Gossett and Wm. J. Moore; Griffin, Ga., Belton C. Plowden; Dallas, Tex., Russell A. Singleton Co., Inc.: Gastonia, N. C., Gastonia Mill Supply Co.; Chattanooga, Tenn., James Supply Co.; Spartanburg, S. C., Montgomery & Crawford.

BURKART-SCHIER CHEMICAL CO., Chattanooga, Tenn. Plants: Chattanooga-Knoxville-Nashville; Sales and Service: C. A. Schier, A. S. Burkart, W. A. Bentel, W. J. Kelly, Dr., George S. McCarty, A. J. Kelly, D. H. Gunther, care of Burkart-Schier Chemical Co., Chattanooga, Tenn.; H. V. Wells, care of Burkart-Schier Chemical Co., Nashville, Tenn.; Lawrence Newman, care of Burkart-Schier Chemical Co., Knoxville, Tenn.; James A. Brittain, 3526 Cliff Road, Birmingham, Ala.; Nelson A. Fisher, 629 Hillside Ave., Glen Ellyn, Chicago, Ill.; Byrd Miller, Woodside Bldg., Greenville, S. C.

BUTTERWORTH & SONS CO., H. W., Philadelphia, Pa. Sou. Rep.: J. H. Zahn, Johnston Bldg, Charlotte, N. C.

CAROLINA REFRACTORIES CO., Hartsville, S. C.

CARTER TRAVELER CO., Gastonia, N. C. R. D. Hughes Sales Co., 1812 Main St., Dallas, Tex., Texas and Arkansas; Eastern Rep. (including Canada); C. E. Herrick, 44 Franklin St., Providence, R. I.; European Rep.: Mellor, Bromley & Co., Ltd., Leicester, England.

CHARLOTTE CHEMICAL LABORATORIES, INC., Charlotte, N. C. Peter S. Gilchrist, Jr. Rep.

CHARLOTTE LEATHER BELTING CO., 314 E. 6th St., Charlotte, N. C. Sales Reps.: J. E. Beattie, P. O. Box 82, Greenville, S. C.; J. L. Harkey and P. L. Pindell, Charlotte Office.

CIBA CO., INC., Greenwich and Morton Sts., New York City. Sou. Offices and Warehouses, Charlotte, N. C.

CLINTON CO., Clinton, Iowa. Sou. Reps.: Luther Knowles, Box 127, Phone 2-2486, Charlotte, N. C.; Grady Gilbert, Box 342, Phone 3192, Concord, N. C.; Clinton Sales Co., Inc., Geo. B. Moore, Box 481, Phone 822, Spartanburg, S. C., and 900 Woodside Bidg., Greenville, S. C., Phone 3713, Boyce L. Estes, Box 132, LaGrange, Ga. Stocks carried at Carolina Transfer & Storage Co., Charlotte, N. C.; Consolidated Brokerage Co., Greenville, S. C.; Bonded Service Warehouse, Atlanta, Ga.; Textile Products Distributing Co., Rock Hill, S. C.; Industrial Chemicals, Roanoke Rapids, N. C.

COCKER MACHINE & FOUNDRY CO., Gastona, N. C.

COLE MFG. CO., R. D., Newnan, Ga.

CORN PRODUCTS REFINING CO., 17 Battery Place, New York City. Corn Products Sales Co., Southeastern Bidg., Greensboro, N. C., W. R. Joyner, Mgr.; Corn Products Sales Co., Montgomery Bidg., Spartanburg, S. C., J. Cantey Alexander, Mgr.; Corn Products Sales Co., Woodside Bidg., Greenville, S. C., J. Alden Simpson, Mgr.; Corn Products Sales Co. (Mill and Paper Starch Div.), Hurt Bidg., Atlanta, Ga., C. G. Stover, Mgr.; Corn Products Sales Co., Comer Bidg., Birmingham, Ala., L. H. Kelly, Mgr. Stocks carried at convenient points.

CURTIS & MARBLE MACHINE CO., 72 Cambridge St., Worcester, Mass. Sou. Reps.: Greenville, S. C., 1000 Woodside Bldg., W. F. Woodward, Tel. 3336; Dallas, Tex., O. T. Daniels, care Textile Supply Co.; New York, N. Y., 200 Fifth Ave., F. C. Bryant.

CUTLER, ROGER W., 141 Milk St., Boston, Mass. Sou. Tape Rep.: M. Bradford Hodges, P. O. Box 752, Atlanta 1, Ga.

DARY RING TRAVELER CO., Taunton, Mass. Sou. Rep.: John E. Humphries, P. O. Box 843, Greenville, S. C.; John H. O'Neill, P. O. Box 720, Atlanta, Ga.; H. Reid Lockman, P. O. Box 515, Spartanburg, S. C.

DAYTON RUBBER MFG. CO., Dayton, O. Sou. Reps.: J. O. Cole, P. O. Box 846, Greenville, S. C.; Kenneth Karns, P. O. Box 846, Greenville, S. C.; Thomas W. Meighan, 1364 Middlesex Ave., N.E., Atlanta, Ga.; T. A. Sizemore, 525 Grove St., Salisbury, N. C. Sou. Jobbers: Greenville Textile Supply Co., Greenville Belting Co., Oreenville, S. C.; Textile Mill Supply Co., Charlotte, N. C.; Young & Vann Supply Co., Greensboro, N. C.; Young & Vann Supply Co., Birmingham, Ala.; Industrial Supply, Inc., LaGrange, Ga.; Textile Supply Co., Dallas, Tex.

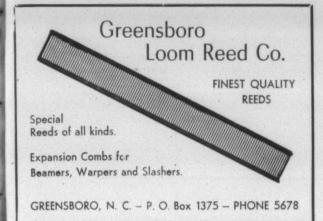
DENISON MFG. CO., THE, Plant and Sales Offices, Asheville, N. C. Sou. Service Rep.: L. C. Denison, P. O. Box 4072, Asheville, N. C.

DODENHOFF CO., W. D., 619 Rutherford St., Greenville, S. C. Rep.: John C. Turner, 107 16th St., N.W., P. O. Box 916, Atlanta 1, Ga., Phone Walnut 2735

DRAPER CORPORATION, Hopedale, Mass. Sou. Offices and Warehouses, Spartanburg, S. C., Clare H. Draper, Jr.; Atlanta, Ga., 242 Forsyth St., S.W., W. M. Mitchell.

DU PONT DE NEMOURS & CO., INC., E. I., Electrochemicals Dept., Main Office, Wilmington, Del.; Charlotte Office, 414 S. Church St., LeRoy Kennette, Dist. Sales Mgr. Reps.; J. L. Moore, Technical Man; N. P. Arnold, 2386 Alston Dr., Atlanta, Ga., Technical Service Man; O. S. McCullers, 208 McPherson Lane, Greenville, S. C., Tech. Rep.

EATON, PAUL B., 218 Johnston Bldg., Charlotte, N. C.



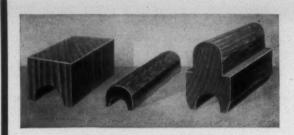


Manufacturers and Builders of

Spinning Cylinders, Card Screens, Conveyor Pipe, Lap Aprons, Sliver Pans, Aspirators, Waste Shute Boxes, Gear Guards, Slasher Work, General Textile Sheet Metal Work.

ESTABLISHED 1912

JENKINS METAL SHOP GASTONIA. N. C.



OIL-LESS
Top Roll Bearings
for
Looms

Prevent Oil Stained Warps

Texwood Manufacturing and Sales Company

GREENVILLE, SOUTH CAROLINA

If It's Made of Wood, or Partly Wood, We Can Furnish It

INDUSTRIAL ENGINEERS



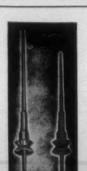
TEXTILES FOR MORE THAN A QUARTER OF A CENTURY

RALPH E. LOPER CO

COST SYSTEMS WORK LOAD STUDIES
PAY ROLL CONTROLS
COST REDUCTION SURVEYS SPECIAL REPORTS

GREENVILLE, S.C.

FALL RIVER, MASS.



We Make

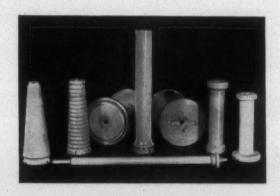
LONG Blade Spindles

SHORT Blade Spindles

by new perfected method of electric welding, and guarantee all spindles not to break under running conditions.

We also change Acorns and Whorls sizes to mill specifications.

GOSSETT MACHINE WORKS W. Franklin Ave. Ext., Gastonia, N. C.



CARD ROOM BOBBINS

ROCK TERMACO MAPLE

SPOOLS

SPECIALISTS WOOD

The Terrell Machine Co. Inc.

CHARLOTTE, N. C.

EMMONS LOOM HARNESS CO., Lawrence, Mass. Sou. Plant, 1 Fourth St., Charlotte, N. C., George A. Field, Mgr.; Clifton E. Watss Sou. Sales. Arthur W. Harris, Harris Mfg. Co., Agt., P. O. Box 1985 Main 2643, Atlanta, Ga.; R. D. Hughes Sales Co., 1812 Main St., I 11835 1982, Ph

ENGINEERING SALES CO., 217 Builders' Bldg., Charlotte, N. C., and Allen Bldg., Greenville, S. C.; S. R. and V. G. Brookshire.

FAFNIR BEARING CO., New Britain, Conn. District Warehouse, 248 Spring St., N.W., Atlanta, Ga. A O. Loughridge, Ga. and Ala. Rep.; Stanley D. Berg, 321 N. Caswell Rd., Charlotte, N. C., Carolinas Rep.

FIDELITY MACHINE CO., 3908-18 Frankford Ave., Philadelphia, Pa. Sou. Reps.: R. C. Aycock, 911 Provident Bldg., Chattanooga, Tenn.

FOSTER MACHINE CO., Westfield, Mass. Sou. Offices, 509 Johnston Bldg.,

FRANKLIN PROCESS CO., Providence, R. I. Sou, Plants, Southern Franklin Process Co., Greenville, S. C.; Central Franklin Process Co., Chattanooga, Tenn.

GASTONIA BRUSH CO., Gastonia, N. C.

GATES RUBBER CO., Denver 17, Colo. Sales Offices and Warehouses at 605 W. Fifth St., Charlotte, N. C.; 801-2 Liberty National Life Bldg., Birmingham, Ala.; 110 Milby St., Houston, Tex.; 1710 N. Market St., Dallas, Tex. Sales Office at 738 C. & S. National Bank Bldg., Atlanta, Ga.

GENERAL COAL CO., 1217 Johnston Bldg., Charlotte, N. C. J. W. Lassiter, Sou. Sales Mgr., Frank W. Reagan, Asst. Sou. Sales Mgr. Reps.: G. P. W. Black, 107 McPherson Lane, Greenville, S. C.; H. G. Thompson, 97 Tacoma Circle, Asheville, N. C.; Guy H. Sowards, 2011 Fairview Road, Raleigh, N. C.; Hugh D. Brower, 2715 Lenox Road, Atlanta, Oa.; H. C. Sturtevant, 212 E. Franklin St, Office No. 5, Richmond, Va.; Dudley H. R. Wigg, 403-404 National Bank of Commerce Bldg., Nortolk, Va.; W. A. Counts, Res. Mgr., Law and Commerce Bldg., Bluefield, W. Va.; Dave B. Smith, Charlotte, N. C. Combustion Engineers, E. H. Chapman, Charlotte, N. C.; J. E. Campbell, Charlotte, N. C.

GENERAL DYESTUFF CORP., 435 Hudson St., New York City. Sou. Office and Warehouse, 2459 Wilkinson Blvd., Charlotte, N. C., S. H. Williams, Mgr.

GILL LEATHER CO., Salem, Mass. Sou. Reps.: Belton C. Plowden, Griffin, Ga., Tel. 3157; Mrs. W. G. Hamner, Gastonia, N. C., Tel. 229; Ralph Gossett, 15 Augusta St., Greenville, S. C., Tel. 150; Wm. J. Moore, P. O. Box 1523, Greenville, S. C., Tel. 150.

GOSSETT MACHINE WORKS, Franklin Ave., Ext., Gastonia, N. C.

GOSSETT MACHINE WORKS, Franklin Ave., Ext., Gastonia, N. C.
GRATON & KNIGHT CO., Worcester 4, Mass. Sou. Reps.: D. A. Ahistrand,
S. E. Dist. Mgr., P. O. Box 4028, Atlanta, Oa.; W. F. McAnulty, 1240 Romany
Road, Charlotte 3, N. C., Phone 3-9573; F. W. Tisdell, P. O. Box 4028,
Atlanta, Ga., Phone; P. T. Pinckney, Jr., Route 2, Germantown, Tenn., Phone
9, Sou. Distributors: Hugh Black, Woodside Bldg. Annex, Greenville, S. C.;
The Cameron & Barkley Co., 180 Meeting St., Charleston, S. C.; Columbus
1ron Works Co., 901 Front St., Columbus, Ga.; The Textile Mill Supply Co.,
1300 S. Mint St., Charlotte, N. C.; Arkansas Mill Supply Co., Inc., Fourth and
Louisiana Sts., Pine Bluff, Ark; Buhrman-Pharr Hardware Co., Texarkana,
Ark.; Keith-Simmons Co., Inc., Cummins Station, Nashville, Tenn.; McGowinLyons Hardware & Supply Co., 113-125 N. Water St., Mobile, Ala; Henry A.
Petter Supply Co., 101-214 S. First St., Paducah, Ky.; Southern Supply Co., E.
Orleans St., Jackson, Tenn.; Lewis Supply Co., Helena, Ark.; Standard Supply
4 Hardware Co., 822 Tchoupitoulas St., New Orleans, La.; Weaks Supply Co.,
Fourth and Jefferson Sts., Monroe, La.; Battey Machinery Co., 100-120 N.
Second Ave., Rome, Ga.; The Cameron & Barkley Co., 107 S. Franklin St., Tampa,
Fla.; Fulton Supply Co., 342 Nelson St., Atlanta, Ga.; Sharp Battery & Electric Co., Broad at Fourth St., Chattanooga, Tenn.; Tennessee Mill & Mine
Supply Co., 406-12 State St., Knoxville, Fenn.; The Young & Vann Supply
Co., 1725 First Ave., Birmingham, Ala.; Lewis Supply Co., 477 S. Main St.,
Memphis, Tenn.

GREENSBORO LOOM REED CO., Greensboro, N. C. Phone 5678. Geo. A.

GREENSBORO LOOM REED CO., Greensboro, N. C. P McFetters, Mgr., Phone 2-0205; A. A. "Red" Brame, Rep Phone 5678. Geo. A.

GREENVILLE BELTING CO., Greenville, S. C.

GULF OIL CORPORATION OF PA., Pittaburgh, Pa. Division Offices: Atlanta, Ga.—A. M. Wright, Greenville, S. C.; W. G. Robertson, Jr., Spartanburg, S. C.; J. H. Hooten, Gastonia, N. C.; R. G. Burkhalter, Charlotte, N. C.; G. P. King, Jr., Augusta, Ga.; Boston, Mass.; New York, N. Y.; Philadelphia, Pa.; New Orleans, La.; Houston, Tex.; Louisville, Ky.; Toledo, O.

H & B AMERICAN MACHINE CO., Pawtucket, R. I. Sou. Offices, 815 The Citizens and Southern National Bank Bldg., Atlanta, Ga., J. C. Martin, Agt.; Johnston Bldg., Charlotte, N. C., Elmer J. McVey, Mgr.; Fritz Sweifel, Fred Dickinson, Jim Miller, sales and service representatives.

HABOW CHEMICAL CO., Conover, N. C.

HART PRODUCTS CORP., 1440 Broadway, New York City. Sou. Mgr., Charles C. Clark, Box 274, Spartanburg, S. C. Sales Rep.; L. M. Boes, Box 517, Charlotte, N. C.

HERSEY, HENRY H., 44 Norwood Place, Greenville, S. C. Selling A. C. Lawrence Leather Co. and New England Bobbin & Shuttle Co

A. C. Lawrence Leather Co. and New England Bobbin & Shuttle Co.

HOUGHTON & CO., E. F., 303 W. Lehigh Ave., Philadelphia 33, Pa. Sou.

Reps.: W. H. Brinkley, Gen. Sales Mgr., Sou. Div., 1301 W. Morehead St.,
Charlotte, N. C., Tel. 3-2916. Sou. Reps.: L. L. Brooks, 23 Jones Ave., Greenville, S. C., Tel. 4856-51; J. W. Byrnes, 701 N. San Jacinto St., Houston 2, Teveville, S. C., Tel. 4856-51; J. W. Byrnes, 701 N. San Jacinto St., Houston 2, Teverel. Jackson 2-7443; C. L. Eigert, 300 Chesapeake Bank Bidg., 7 St. Paul St.,
Baltimore, Md., Tel. Saratoga 2388; T. E. Hansen, Rt. No. 2, Box 396, Glen
Allen, Va., Tel. 5-1620; J. J. Rellly, 2788 Peachtree Rd., N.E., Apt. 6-B, Atlanta, Ga., Tel. Cherokee 7660; V. C. Shadden, P. O. Box 935, Chattanooga,
Tenn.; C. G. Schultze, 1301 W. Morehead St., Charlotte, N. C., Tel. 3-5916;
S. P. Schwoyer, P. O. Box 1507, or, 3021/2 Otteray Drive, High Foint, N. C.,
Tel. 3564; J. W. Butler, 1301 W. Morehead St., Charlotte, N. C., Tel. 3-2916;
W. C. McMann, 1301 W. Morehead St., Charlotte, N. C., Tel. 3-2916; H. J.
Reid, 212 Lamont Drive, Decatur, Ga., Tel. Dearborn 4564.

HOUGHTON WOOL CO., 258 Summer St., Phone Liberty 1875, Boston Sou. Rep.: Jas. E. Taylor, P. O. Box 2084, Phone 3-3692, Charlotte, N.

HOWARD BROS. MFG. CO., 44-46 Vine St., Worcester, Mass. Sou. Offices and Plants, 244 Forsyth St., S.W., Atlanta, Ga.; Guy L. Melchor, Sou. Agent; J. Floyd Childs, 219-223 S. Linwood St., Gastonia, N. C.; Carl M. Moore, Agent; Southwestern Rep.: Russell A. Singleton Co., Inc., 718 Brown Bldg., Austin, Tex.

IDEAL MACHINE CO., Bessemer City, N. C.

INDUSTRIAL RAYON CORP., Cleveland, O. Sou. Reps.: J. H. Mason, P. O. Box 897, Greensboro, N. C.; W. L. Jackson, 900 Woodside Bldg., Greenville,

JACOBS MFG. CO., THE E. H., Danielson, Conn., and Charlotte, N. C. Sou. Executive, W. Irving Bullard, Pres., Charlotte, N. C.; Sou. Sales Mgr., S. B. Henderson, P. O. Box 133, Greer, S. C.; Sou. Rep.: William P. Russell, Box 778 Atlanta, Ga.; Sou. Subsidary, The E. H. Jacobs Mfg. Corp., Box 3096, Charlotte, N. C. Sou. Distributors: Odell Mill Supply Co., Greensboro, N. C.; Textile Mill Supply Co., Charlotte, N. C.; Charlotte Supply Co., Charlotte, N. C.; Charlotte Supply Co., Charlotte, N. C.; Sullivan Hardware Co., Anderson, S. C.; Montgomery & Crawford, Inc., Spartanburg, S. C.; Carolina Supply Co., Greenville, S. C.; Greenville, S. C.; Fontgomery & Greenville, S. C.; Funderson, S. C.; Montgomery & Grawford, Inc., Spartanburg, S. C.; Carolina Supply Co., Greenville, S. C.; Soulthern Belting Co., Greenville, S. C.; Funderson, S. C.; Atlanta, Ga.; Southern Belting Co., Greenville, S. C.; Southern Belting Co., Atlanta, Ga.; The Young & Vann Supply Co., Birmingham, Ala.

JARRETT & CO., CECIL H., Newton, N. C.

JENKINS METAL SHOP, Gastonia, N. C.

JOHNSON CHEMICAL CO., Statesville Ave., Charlotte, N. C. P. Box 1118, Stephen J. Hawes, Norman P. Dort.

JORDAN MFG. CO., W. H. & F., JR., 2126 E. Somerset St., Philadelphia 34, Pa. Sou. Rep.: E. B. Wheeler, P. O. Box 501, Charlotte 1, N. C.

KEARNY MFG. CO., INC., Kearny, N. J. (Hygrolit). Sou. Plant and Offices, Greenville, S. C. W. O. Slimback, Mgr. Sou. Reprs.: Harold Mahon, Greens-boro, N. C.; Wm. P. Russell, Atlanta, Ga.; Russell A. Singleton, Austin, Tex.

KEEVER STARCH CO., Columbus, O. Sou. Office, 1200 Woodside Bldg. Greenville, S. C.; Claude B. Iler, Sou. Mgr. Sou. Warehouses: Greenville, S. C., Charlotte, N. C. Sou. Reps.; C. C. Switzer, Greenville, S. C.; Luke J Castile, 24 Monticello Terrace, Charlotte, N. C.; F. M. Wallace, Homewood Birmingham, Ala.

KEYSTONE BELTING CO., 213 N. Third St., Philadelphia, Pa. Sou. Rep.: T. J. Digby, Jr., P. O. Box 244, Greer, S. C.

LAMBETH ROPE CORP., New Bedford, Mass, Charlotte Rep.: Frank Burke,

LAUREL SOAP MFG, CO., INC., 2607 E. Tioga St., Philadelphia, Pa., Sou. Reps.: A. Henry Gaede, P. O. Box 1083, Charlotte, N. C.; W. R. Sargent, P. O. Box 1044, Greenville, S. C.

LAWRENCE LEATHER CO., A. C., Peabody, Mass. Henry H. Hersey, Selling Agent, 44 Norwood Place, Greenville, S. C.

LOPER CO., RALPH E., 500 Woodside Bidg., Greenville, S. C. New England Office, Buffington Bldg., Fall River, Mass.

MAGUIRE & CO., JOHN P., 370 Fourth Ave., New York City. Sou. Rep.: Taylor R. Durham, Liberty Life Bldg., Charlotte, N. C.

MARQUETTE METAL PRODUCTS CO., Cleveland, O. Sou. Rep.: Byrd Miller, Woodside Bldg., Greenville, S. C.

MATHIESON ALKALI WORKS, INC., THE, 60 E. 42nd St., New York City. Southeastern Dist. Sales Office: Liberty Life Bidg., Charlotte. N. C., Fred O. Tilson, Sou. Dist. Sales Mgr. Reps.: R. C. Staples, Z. N. Holler, J. W. Ivey, Frank Thomas, John Staples, Vernon Woodside, Harold Dinges.

MEADOWS MFG. CO., P. O. Box 4354, Atlanta, Ga

MERROW MACHINE CO., THE, 8 Laurel St., Hartford, Conn. Hollister-Moreland Co., P. O. Box 721, Spartanburg, S. C.

METALLIZING CO. OF AMERICA, THE, 1330 W. Congress St., Chicago, III. Sou. Offices: E. J. Ferring, Mgr., 901 William-Oliver Bldg., Atlanta 3, Ga.; E. M. Kay, Mgr., 120 Brevard Court, Charlotte 2, N. C.

MILL DEVICES CO., Gastonia, N. C. R. D. Hughes Sales Co., 1812 Main St. Dallas, Tex., Texas and Arkansas; Eastern Rep. (including Canada), C. E Herrick, 44 Franklin St., Providence, R. I.; European Rep.: Mellor, Bromlej & Co., Ltd., Leicester, England.

MILLER, BYRD, Manufacturers' Agent, Woodside Bldg., Greenville, S. C.

NATIONAL ANILINE DIVISION, Allied Chemical & Dye Corp. Gen. Office, 40 Rector St., New York City. Julian T. Chase, Res. Mgr., 201 W. First St., Charlotte, N. C., Kenneth Mackenzie, Asst. to Res. Mgr., 201 W. First St., Charlotte, N. C. Salesmen: W. L. Barker, R. B. Murdoch, Harry L. Shim, A. R. Akerstrom, 201 W. First St., Charlotte, N. C.; J. H. Shuford, Jefferson Standard Bidg., Greensboro, N. C.; H. A. Rodgers, 1202 James Bidg., Chattanooga, Tenn.; J. I. White, American Savings Bank Bidg., Atlanta, Ga.; W. H. Jackson, Apt. 10-A. Country Club Apts., Columbus, Ga.; A. Jones, Jr., 806 Masonic Temple Bidg., New Orleans, La.

NATIONAL RING TRAVELER CO., 354 Pine St., Pawtucket, R. I. Sou. Office and Warehouse, 131 W. First St., Charlotte, N. C. Sou. Agt., L. E. Taylor, Charlotte, N. C. Sou. Reps.: Otto Pratt, Union Mills, N. O.; H. B. Askew, P. O. Box 221, Griffin, Ga.

NEW ENGLAND BOBBIN & SHUTTLE CO., Nashua, N. H. Sou, Reps.: Charlotte Supply Co., Charlotte, N. C.; Mrs. W. G. Hamner, Box 26, Gastonia, N. C.; Arthur W. Harris, 443 Stonewall St., S.W., Atlanta, Ga.; Henry H. Hersey, Norwood Place, Greenville, S. C.

N. Y. & N. J. LUBRICANT CO., 292 Madison Ave., New York City. Sou. Office, 1000 W. Moreheard St., Phone 3-7191, Charlotte, N. C., Spartanburg, S. C., Atlanta, Ga., Greenville, S. C. Falls L. Thomason, Sou. Dist. Mgr.

NOBLE, ROY, New Bedford, Mass. Sou. Rep.: John P. Batson, P. O. Box 841, Greenville, S. C.

NORLANDER-YOUNG MACHINE CO., New Bedford, Mass. Sou. Plant, York Road, Gastonia, N. C.

ONYX OIL & CHEMICAL CO., Jersey City, N. J. Sou. Reps.: Edwin W. Klumph, Cliff C. Myers, 121 E. 3rd St., Charlotte, N. C.; Cliff Smith, P. O. Box 671, Atlanta, Ga. ORKIN EXTERMINATING CO., Pest and Termite Control. Carolina Offices, 1507 Liberty Life Bldg., Charlotte, N. C.; Main Office, 315 Peachtree St., N.E., Atlanta, Ga.

PABST SALES CO., 221 N. LaSaile St., Chicago I, Ill. Sou, Rep.; C. H. Patrick, P. O. Box 300, Salisbury, N. C., Phone 1066. Sou. Warehouse, Textile Warehouse Co., Greenville, S. C.

PARKS-CRAMER CO., Plants at Fitchburg, Mass., and Charlotte, N. C. Atlanta Office, Bona A'len Bldg.

PEACH & CO., D. W., Gastonia, N. C. D. W. Peach.

If it's QUALITY SERVICE and ACCURACY you require to RECONDITION YOUR SPINNING TWISTER FLYER and DRAWING FRAME STEEL ROLLS, CALL

NORLANDER-YOUNG MACHINE CO.

York Road + Tel. 1084 + Gastonia, N. C.

We are also specialists in all kinds of FLYER and SPINDLE repairs and manufacture flyer pressers

OUR MOTTO: QUALITY AND SERVICE AT A MINIMUM COST
Has realized thousands of repeated orders



ille,

118

nd

p.:

Baling Press

Motor Drive, Silent Chain, Center of Screw.

Push Button Control — Reversing Switch with limit stops up and down.

Self Contained. Set anywhere you can run a wire.

Our Catalogue sent on request will tell you more about them

DUNNING & BOSCHERT PRESS CO., Inc.

328 West Water Street

SYRACAUSE, N. Y.

BARKLEY

MACHINE WORKS

MANUFACTURERS OF

TEXTILE MACHINERY

PARTS

GASTONIA, NORTH CAROLINA



KEARNY MANUFACTURING CO., Inc.

KEARNY, N. J.

GREENVILLE, S. C.

Makers of Hygrolit Conditioning Machinery and Hygrolit Conditioning Liquids. For over 35 years, pioneers of chemical conditioning.

Remember the name



VOGEL FROST-PROOF HYDRANT Running water every day of the year. Will never freeze when properly installed. Nearly 1 00,000 in use.

"VOGEL"

Yes, remember it well because it is a symbol of satisfaction among customers and plumbers alike.

Vogel Frost-Proof Hydrants are serving the war effort throughout the Nation—in war plants of all kinds, in shipyards and on thousands of farms... And they are serving in the traditional Vogel way—economically and dependably—day in and day out.

JOSEPH A. VOGEL COMPANY

WILMINGTON 99, DELAWARE

AN IMPORTANT POST-WAR MESSAGE

to Producers of Cotton Knitting Yarns

Our business, while comparatively new, is quite substantial and shows a steady, healthy expansion.

We operate our own knitting plants, and have factories located in Pennsylvania, New York and New Jersey.

We are desirous of establishing contacts now for post-war business with responsible producers of finer count cotton knitting yarns.

We will be a very satisfactory and substantial consumer of yarns, and our financial standing is of the very highest.

We invite Correspondence or Personal Contacts.

WILLIAM GLUCKIN & COMPANY

53 WEST 23RD ST. PHONE GRAMERCY 5-1400 NEW YORK 10, N. Y.

HACKENSACK, N. J.

PITTSTON, PA.

PEASE & CO., J. N., Johnston Bldg., Charlotte, N. C.

PENICK & FORD, LTD., INC., 420 Lexington Ave., New York City; Cedar Rapids, Iowa. P. G. Wear, Sou. Sales Mgr., 805 Bona Allen Bidg., Atlanta, Ga.; J. H. Almand, W. J. Kirby, Atlanta Office; C. T. Lassiter, Greensboro, N. C.; Guy L. Morrison, 902 Montgomery Bidg., Spartanburg, S. C. Stocks carried at convenient points.

PIEDMONT PROCESSING CO., Belmont, N. C.

PITTSBURGH PLATE GLASS CO., Columbia Chemical Div., Grant Bldg., Pittsburgh, Pa. Dist. Sales Office, 615 Johnston Bldg., Charlotte, N. C., James R. Simpson, Dist. Sales Mgr.

PROVIDENT LIFE & ACCIDENT INS. CO. (Group Accident and Health and Welfare Plans Div.), Chattanooga, Tenn. Southeastern Div. Office, 815 Commercial Bank Bldg., Gastonia, N. C.

RAGAN RING CO., Atlanta, Ga. John H. Foard, Box 574, Phone 178, Newton, N. C.

RAY CHEMICAL CO., 2316 S. Blvd., Charlotte, N. C.

ROHM & HAAS CO., 222 W. Washington Square, Philadelphia, Pa., Sou. Office: P. H. Del Plaine, Dist. Mgr., 1109 Independence Bldg., Charlotte, N. C., Phone 2-3201, A. K. Haynes, 1811 Meadowdale Ave., N.E., Atlanta, Ga., Phone

ROY & SON CO., B. S., Worcester, Mass. Sou. Office, Box 1045, Greenville, S. C., Jack Roy, Rep. Sou. Distributors: Odell Mill Supply Co., Greensboro, N. C.; Textile Mill Supply Co., Charlotte, N. C.; Textile Supply Co., Dallas, Tex.

SACO-LOWELL SHOPS, 60 Batterymarch St., Boston, Mass. Sou. Office and Supply Depot, Charlotte, N. C., Walter W. Cayle, Sou. Agt., F. Robbins Lowe and Charles S. Smart, Jr., selling Agts. Atlanta, Ga., John L. Graves, Mgr., and Miles A. Comer, Selling Agt., Greenville, S. C., H. P. Worth, Selling Agt.

SCOTT CO., HENRY L., 115 Blackstone St., Providence, B. I. Sou. Rep.: John Klinck, 304 Forest Ave., Augusta, Ga.

SEYDEL-WOOLLEY & CO., 748 Rice St., N.W., Atlanta, Ga.

SHINGLE & GIBB LEATHER CO., Philadelphia, Pa.

SINCLAIR REFINING CO., Dist. Office: 573 W. Peachtree St., Atlanta, Ga. State Offices: Atlanta, Ga.; Birmingham, Ala.; Jacksonville, Fla.; Columbia, S. C.; Charlotte, N. C.; Nashville, Tenn.; Jackson, Miss. Industrial Reps.; P. W. Godard, Birmingham, Ala.; L. M. Kay, Atlanta, Ga.; A. F. Landers, Lakeland, Fla.; R. R. Boatwright, Jacksonville, Fla.; S. M. Newsom, Tifton, Ga.; J. O. Holt, Raleigh, N. C.; C. C. Nix, Charlotte, N. C.; J. F. Welchel, Columbia, S. C.; G. C. Kimbrough, Knoxville, Tenn.; P. A. Raiche, Memphis, Tenn.

SLIP-NOT BELTING CORP., Kingsport, Tenn. Sou. Reps.: E. S. Meservey, 134 McClean St., Decatur, Ga.; Ga. and Ala. Rep.: G. H. Spencer, P. O. Box 1297, Gastonia, N. C.; N. C. Rep.: Jack Alexander, 2024 Rozzell's Ferry Rd., Charlotte, N. C.; part of N. C. and S. C. Rep.: T. E. Doane, 1421 W. Sullivan St., Kingsport, Tenn.; Tenn. and Va. Rep.: J. D. Cox, V.-Pres., Greenville Hotel, Greenville, S. C., and Kingsport, Tenn.; O. L. Carter, 202 Aberdeen Ave., Greenville, S. C.

SOCONY-VACUUM OIL CO., INC., Southeastern Div. Office, 1602 Baltimore Trust Bidg., Baltimore, Md. Warehouses; Union Storage Co., 224 W. 1st St., Charlotte, N. C.; Textile Warehouse Co., 511 Rhett St., Greenville, S. C.; South Atlantic Bonded Warehouse Co., Greensboro, N. C.; Columbia Warehouse & Truck Terminal, 902 Pulaski St., Columbia, S. C.; Terminal Storage Corp., 317 N. 17th St., Richmond, Va.; Taylor Transfer Co., Water and Mathews Sts., Norfolk Va.

SOLVAY SALES CORP., 40 Rector St., New York City. Sou. Branches: 212 S. Tryon St., Charlotte, N. C., H. O. Pierce, Mgr. Sou. Reps.; Earl H. Walker, 10161/2 Minerva Ave., Durham, N. C.; H. W. Causey, 215 Middleton Drive, Charlotte, N. C.; M. W. Fletcher, 2973 Hardman Court, Atlanta, Ga.

SONOCO PRODUCTS CO., Hartsville, S. C.

SOUTHEASTERN CONSTRUCTION CO., Charlotte, N. C. Earle Whitton,

SOUTHERN BELTING CO., 236-8 Forsyth St., S.W., Atlanta, Ga. Sou. Reps.: A. P. Mauldin, 1376 Graham St., S.W., Atlanta, Ga.; E. G. Merritt, 549 Peachtree Battle Ave., Atlanta, Ga.; J. J. Merritt, 1428 Peachtree St., N.E., Atlanta, Ga.; J. H. Riley, 3013 Monroe St., Columbia, S. C.; S. C. Smith, 2526 Delwood Drive, N.W., Atlanta, Ga.

LATEST EDITION!

The 1944-45 Pocket Size Edition of

Clark's Directory of Southern Textile Mills

Gives capital, number of machines, officers, buyers, superintendents, kind of power used, product and telephone number of every Southern Textile Mill.

Also contains "Hints for Traveling Men."

PRINTED ON THIN PAPER, CLOTH BOUND-PRICE \$2.00

Orders Promptly Filled

CLARK PUBLISHING COMPANY

P. O. BOX 1225

CHARLOTTE 1, N. C.

SOUTHERN LOOM-REED MFG. CO., INC., Gaffney, S. C.

SOUTHERN SPINDLE & FLYER CO., Charlotte, N. C.

SOUTHERN STANDARD MILL SUPPLY CO., 512-514 W. Fourth St., Charlotte, N. C. A. Benson Davis, Mgr.

STALEY MFG. CO., A. E., Decatur, Ill. Sou. Offices, 2000 Rhodes-Haverty Bldg., Atlanta, Ga. Wm. H. Randolph, Jr., Southeastern Mgr.; L. A. Dillon, Asst. Southeastern Mgr. Sou. Reps.: George A. Dean, H. A. Mitchell, Montgomery Bldg., Spartanburg, S. C.; W. T. O'Steen, Greenville, S. C.; H. F. Taylor, Jr., P. O. Box 1303, Charlotte, N. C.; W. N. Dulaney, 12 Montevallo Lane, Birmingham, Ala.

STANLEY WORKS, THE, New Britain, Conn. Sales Reps.: A. Y. Bristoll, 104 Maple Ave., Tel. Narberth 3795, Narberth, Pa.; G. R. Douglas, 707 Columbian Mutual Towers, Tel. 8-7117, Memphis, Tenn.; M. A. Hawkins, 3813 General Taylor St., Tel. Upton 6057-J, New Orleans, La.; H. C. Jones, care The Stanley Sales Co., 651 Humphries St., S.W., Tel. Main 4110, Atlanta, Ga.; W. D. Low, Fox Drive, Chattanooga, Tenn.; G. J. McLernan, 209 Hubbard St., San Antonio, Tex.; C. W. Lynch, 2814 Arcadia St., Charlotte, N. C.

STEELCOTE MFG. CO., St. Louis, Mo. Carolinas and Georgia Distributors: Moreland Chemical Co., Spartanburg, S. C.

STEEL HEDDLE MFG. CO., Main Office and Plant, 2100 W. Allegheny Ave., Philadelphia, Pa. Greensboro Office, Guilford Bank Bldg., Box 1917, Greensboro, N. C., C. W. Cain, Mgr.; Henry P. Goodwin, Sales and Service. Greensboro, N. C., C. W. Cain, Mgr.; Henry P. Goodwin, Sales and Service. Greenstille Office and Plant, 621 E. McBee Ave., Box 1899, Greenville, S. C., J. J. Kaufmann, Jr., Asst. V.-Pres. and Mgr. of Southern Divisions; Davis L. Batson and Sam Zimmerman, Jr., Sales and Service. Atlanta Office and Plant, 268 McDonough Blvd., Box 1496, Atlanta, Ga., Vernon A. Graff, Mgr.; Southern Shuttles, a division of Steel Heddle Mfg. Co., 621 E. McBee Ave., Greenville, S. C., J. J. Kaufman, Jr., Mgr.; Louis P. Batson, Dirctor of Sales.

STEIN, HALL & CO., INC., 285 Madison Ave., New York City. Sou. Office, Johnston Bldg., Charlotte, N. C., Ira L. Griffin, Mgr., W. N. Kline, 2500 Roswell Ave., Charlotte, N. C.; E. D. Estes, 1257 Durand Dr., N.E., Atlanta, Ga.

STERLING RING TRAVELER CO., 101 Lindsey St., Fall River, Mass. Sou. Rep.: Geo. W. Walker, P. O. Box 1894, Greenville, S. C.; D. J. Quillen. P. O. Box 443, Spartanburg, S. C.

TERRELL MACHINE CO., Charlotte, N. C. E. A. Terrell, Pres. and Mgr.

TEXAS CO., THE, New York, N. Y. Dist. Offices, Box 901. Norfolk, Va., and Box 1722, Atlanta, Ga. Bulk Plants and Warehouses in all principal cities. Lubrication Engineers: P. C. Bogart, Norfolk, Va.; D. L. Keys, S. Brooklyn Sta., Baltimore, Md.; W. H. Boebel, Roanoke, Va.; F. M. Edwards, Goldsboro, N. C.; W. P. Warner and R. L. Scott, Greensboro, N. C.; B. D. Heath and C. W. Meador, Charlotte, N. C.; J. S. Leonard, Greenville, S. C.; F. G. Mitchell, Charleston, S. C.; L. C. Mitchum, Atlanta, Ga.; A. C. Keiser, Jr., Atlanta, Ga.; J. G. Myers, Birmingham, Ala.; P. H. Baker, textile engineer, New York, N. Y.

TEXTILE APRON CO., East Point, Ga.

TEXTILE SPECIALTY CO., Box 1297, Phone 2-2238, Greensboro, N. C. L. C. Atkisson, Greensboro, N. C.; F. A. Decker, 1119 Dilworth Rd., Charlotte, N. C.; J. W. Slaughter, 311 Aberdeen Ter., Greenville, S. C.; for Georgia and Alabama. Matthews Equipment Co., 93-A Broadway, Providence, R. I., for New England and Canada.

TEXWOOD MFG. & SALES CO., Greenville, S. C.

U S BOBBIN & SHUTTLE CO., Lawrence, Mass. Sou. Plants, Greenville, S. C.; Johnson City, Tenn. Sou. Reps.: E. Rowell Holt, 208 Johnston Bldg., Charlotte, N. C.; M. Ousley, P. O. Box 816, Greenville, S. C.; D. C. Ragan, High Point, N. C.; A. D. Roper, Johnson City, Tenn.

U. S. RING TRAVELER CO., 159 Aborn St., Providence, R. I. Sou. Reps.; William W. Vaughan and Wm. H. Rose, P. O. Box 792, Greenville, S. C.; Oliver B. Land, P. O. Box 158, Athens, Ga.; Torrence L. Maynard, P. O. Box 456, Belmont, N. C.; Harold R. Fisher, P. O. Box 33, Concord, N. C.

UNIVERSAL WINDING CO., Providence, R. I. Sou. Offices, 819 Johnston Bldg., Charlotte. N. C. Agts.: I. E. Wynne and R. M. Mauldin; 903 Norris Bidg., Atlanta, Ga., Acting Agt., I. E. Wynne.

VALENTINE & CO., J. W., New York City. Sou. Rep.: T. Holt Haywood, 62 S. Main St., Winston-Salem, N. C.

VEEDER-ROOT, INC., Hartford, Conn. Sou. Office, Room 231, W. Washington St., Greenville, S. C., Edwin Howard, Sou. Sales Mgr.

VICTOR RING TRAVELER CO., Providence, R. I., with Sou. Office and Stock Room at 173 W. Franklin Ave., P. O. Box 842, Gastonia, N. C. Also stock room in charge of W. L. Hudson, 1021 Virginia Ave., N.E., Atlanta, Ga.

WAK INDUSTRIES, Charlotte, N. C.

WALKER MFG. CO., INC., Philadelphia, Pa. Sou. Rep.: R. T. Osteen, Sou. Mgr., 11 Perry Road, Phone Greenville 1869, Greenville, S. C. Greenville Textile Supply Co., Greenville, S. C.; Odell Mill Supply Co., Greensboro, N. C.; R. D. Hughes Sales Co., 1812 Main St., Dallas, Tex.; R. B. Dorman, Box 66, Station C, Atlanta, Ga.

WARWICK CHEMICAL CO., W. Warwick, R. I. Sou, Branch Factory at Rock Hill, S. C. Sou, Reps.: M. M. McCann, Box 825, Burlington, N. C.; Henry Papini, 806 Mills Ave., Greenville, S. C.; W. E. H. Searcy, III, Box 143, Griffin, Ga.

WATSON-WILLIAMS MFG. CO., Milibury, Mass, Sou. Office: Walter F. Daboll, 810 Woodside Bldg., Greenville, S. C.

WHITEHEAD MACHINERY CO., TROY, P. O. Box 1694, Charlotte, N. C.

WHITIN MACHINE WORKS, Whitinsville, Mass. Sou. Office, Whitin Bldg., Charlotte, N. C., W. H. Porcher and R. I. Dalton, Mgrs.; 1317 Healey Bldg., Atlanta, Ga. Sou. Reps.: M. P. Thomas, Charlotte Office; M. J. Bentley, Selling Agt., Atlanta Office, 1317 Healey Bldg.

WHITINSVILLE SPINNING RING CO., Whitinsville, Mass.

WILLIAMS & SONS, I. B., Dover, N. H. Sou. Agt., Charles C. Withington, 602 Woodside Bldg., Greenville, S. C., Tel. 1218.

WOLF, JACQUES & CO., Passaic, N. J. Sou. Reps.: C. R. Bruning, 302 N. Ridgeway Drive, Greensboro, N. C.; G. W. Searell, R. No. 15, Knoxville, Tenn.



har-

bian neral stan-D. San

Sou.

and ties. klyn oro, and G. Jr., eer,

and

dg.,

C.;

ton

62

ton

N

· On the other hand, the "Continuous Process" is capable of making a gossamer yarn for the daintiest cobweb of a fabric. This yarn, in textile sizes, is the famous

Spun-lo



and Strong, uniform, knotfree yarn is the secret of an exquisite dress material. The "Continuous Process" produces that, too. Not much now (war work, you know) but this is the time to learn the characteristics of "Continuous Process" *Spun-lo,

BY THE Continuous Process

*Reg. U.S. Pat. Off.

CLEVELAND, OHIO . New York Office, 500 Fifth Avenue

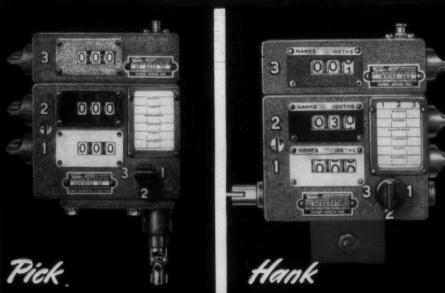
Count on Veeder-Root

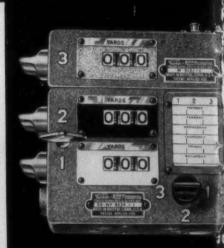
FOR NEW DEVELOPMENTS IN

COUNTROL

OF TEXTILE MACHINERY







Yardage

Counters

Just as Veeder-Root developed the "famous first" of quick convertibility from 2-to 3-shift operation for 2-3 Pick, Hank, and Yardage Counters... so now Veeder-Root scores another important improvement in counter-operation with a new design-feature that resists

overthrowing of the resetting figure-wheels. Ask your Veeder-Root Field Engineer...or write the nearest Veeder-Root office...about this new development. And remember that you can always count on Veeder-Root to develop the new "things that count" for textile mills.

VEEDER-ROOT INC., HARTFORD 2, CONN.

